

10566880

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PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * Welcome to STN International * * * * *

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NEWS 4 OCT 07 Multiple databases enhanced for more flexible patent
number searching
NEWS 5 OCT 22 Current-awareness alert (SDI) setup and editing
enhanced
NEWS 6 OCT 22 WPIDS, WPINDEX, and WPIX enhanced with Canadian PCT
Applications
NEWS 7 OCT 24 CHEMLIST enhanced with intermediate list of
pre-registered REACH substances
NEWS 8 NOV 21 CAS patent coverage to include exemplified prophetic
substances identified in English-, French-, German-,
and Japanese-language basic patents from 2004-present
NEWS 9 NOV 26 MARPAT enhanced with FSORT command
NEWS 10 NOV 26 MEDLINE year-end processing temporarily halts
availability of new fully-indexed citations
NEWS 11 NOV 26 CHEMSAFE now available on STN Easy
NEWS 12 NOV 26 Two new SET commands increase convenience of STN
searching
NEWS 13 DEC 01 ChemPort single article sales feature unavailable

NEWS EXPRESS JUNE 27 08 CURRENT WINDOWS VERSION IS V8.3,
AND CURRENT DISCOVER FILE IS DATED 23 JUNE 2008.

NEWS HOURS STN Operating Hours Plus Help Desk Availability
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NEWS IPC8 For general information regarding STN implementation of IPC 8

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* * * * * STN Columbus * * * * *

FILE 'HOME' ENTERED AT 09:39:36 ON 03 DEC 2008

10566880

=>

Uploading

THIS COMMAND NOT AVAILABLE IN THE CURRENT FILE

Do you want to switch to the Registry File?

Choice (Y/n):

Switching to the Registry File...

Some commands only work in certain files. For example, the EXPAND command can only be used to look at the index in a file which has an index. Enter "HELP COMMANDS" at an arrow prompt (=>) for a list of commands which can be used in this file.

=> FILE REGISTRY

| COST IN U.S. DOLLARS | SINCE FILE ENTRY | TOTAL SESSION |
|----------------------|------------------|---------------|
| FULL ESTIMATED COST | 0.21 | 0.21 |

FILE 'REGISTRY' ENTERED AT 09:39:52 ON 03 DEC 2008
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STRUCTURE FILE UPDATES: 1 DEC 2008 HIGHEST RN 1078205-21-6
DICTIONARY FILE UPDATES: 1 DEC 2008 HIGHEST RN 1078205-21-6

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH July 5, 2008.

Please note that search-term pricing does apply when conducting SmartSELECT searches.

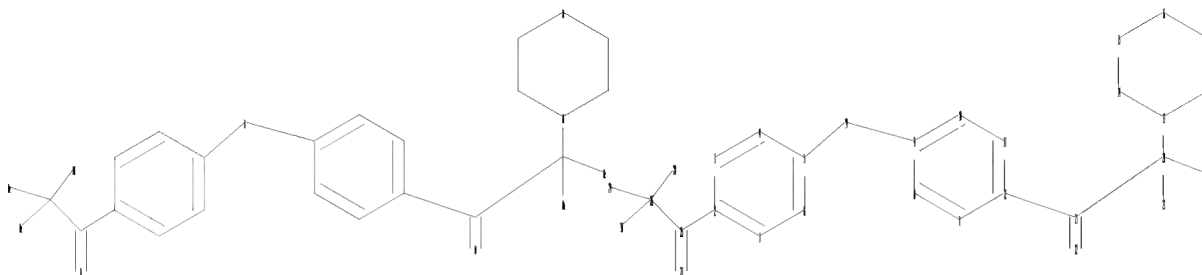
REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

=>

Uploading C:\Program Files\Stnexp\Queries\10566880.str

10566880



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chain nodes :
19 20 21 22 23 24 25 26 27 28 29 30
ring nodes :
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18
chain bonds :
2-25 5-19 9-19 12-21 13-20 20-21 20-23 20-24 21-22 25-26 25-27 26-28
26-29 26-30
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12 13-14 13-18
14-15 15-16 16-17 17-18
exact/norm bonds :
5-19 9-19 13-14 13-18 13-20 14-15 15-16 16-17 17-18 21-22 25-27 26-28
exact bonds :
2-25 12-21 20-21 20-23 20-24 25-26 26-29 26-30
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12
isolated ring systems :
containing 1 : 7 : 13 :
```

```
Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:CLASS
20:CLASS 21:CLASS 22:CLASS 23:CLASS 24:CLASS 25:CLASS 26:CLASS 27:CLASS
28:CLASS 29:CLASS 30:CLASS
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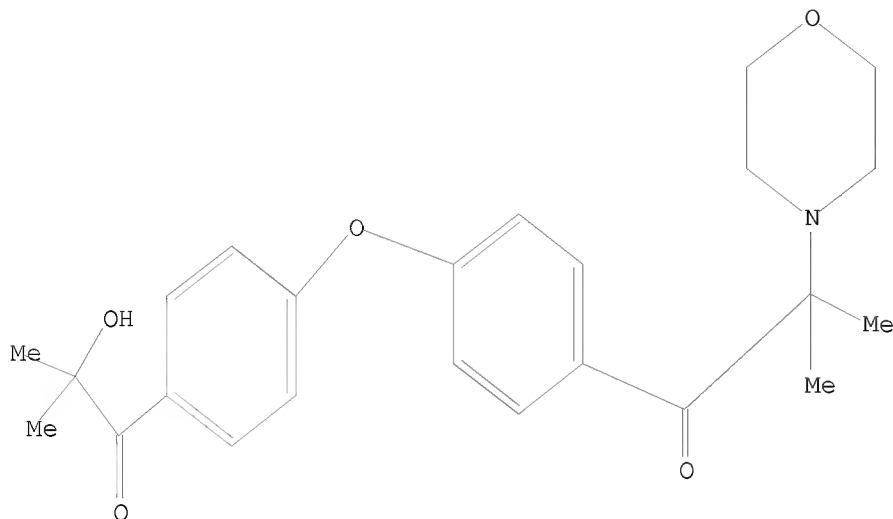
L1 STRUCTURE UPLOADED

=> d 11

L1 HAS NO ANSWERS

L1 STR

10566880



Structure attributes must be viewed using STN Express query preparation.

=> s l1

SAMPLE SEARCH INITIATED 09:40:11 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 2 TO ITERATE

100.0% PROCESSED 2 ITERATIONS

0 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**

PROJECTED ITERATIONS: 2 TO 124

PROJECTED ANSWERS: 0 TO 0

L2 0 SEA SSS SAM L1

=> s l1 sss full

FULL SEARCH INITIATED 09:40:22 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 29 TO ITERATE

100.0% PROCESSED 29 ITERATIONS

1 ANSWERS

SEARCH TIME: 00.00.01

L3 1 SEA SSS FUL L1

=> FIL HCAPLUS

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

178.36

178.57

FILE 'HCAPLUS' ENTERED AT 09:40:32 ON 03 DEC 2008

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FILE COVERS 1907 - 3 Dec 2008 VOL 149 ISS 23
FILE LAST UPDATED: 2 Dec 2008 (20081202/ED)

HCAplus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2008.

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s l3

L4 1 L3

=> d l4 ibib abs hitstr tot

L4 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:141006 HCAPLUS

DOCUMENT NUMBER: 142:221238

TITLE: Clear photopolymerizable systems for the preparation of high thickness coatings, their application and to solid surfaces coated with them

INVENTOR(S): Norcini, Gabriele; Romagnano, Stefano; Visconti, Marco; Li Bassi, Giuseppe

PATENT ASSIGNEE(S): Lamberti S.p.A., Italy

SOURCE: PCT Int. Appl., 27 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|--|----------|-----------------|----------|
| WO 2005014515 | A2 | 20050217 | WO 2004-EP51699 | 20040803 |
| WO 2005014515 | A3 | 20050428 | | |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | |
| RW: | BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, | | | |

SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,
 SN, TD, TG

| | | | | |
|--|----|----------|------------------|------------|
| CA 2532458 | A1 | 20050217 | CA 2004-2532458 | 20040803 |
| EP 1670740 | A2 | 20060621 | EP 2004-766405 | 20040803 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK | | | | |
| CN 1832912 | A | 20060913 | CN 2004-80022487 | 20040803 |
| JP 2007501776 | T | 20070201 | JP 2006-522355 | 20040803 |
| US 20060246228 | A1 | 20061102 | US 2006-566880 | 20060202 |
| PRIORITY APPLN. INFO.: | | | IT 2003-VA28 | A 20030807 |
| | | | WO 2004-EP51699 | W 20040803 |

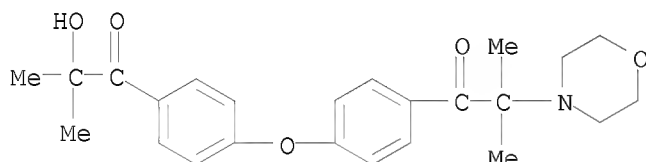
OTHER SOURCE(S): MARPAT 142:221238

AB The clear photopolymerizable systems comprise ethylenically unsatd. oligomers and/or monomers and ≥ 1 bifunctional photoinitiators such as Me₂C(OH)CO-p-C₆H₄O-p-C₆H₄COC(OH)Me₂ (I, preparation given) responsible for a high reactivity, of complete crosslinking in depth, and good yellow and white indexes (ASTM D1925-700). A coating matrix contained Ebecryl 220 75 OTA 480 12.5 HDDA 12.5 %, and photoinitiator I.

IT 842172-59-2P
 RL: CAT (Catalyst use); IMF (Industrial manufacture); PREP (Preparation); USES (Uses)
 (clear photopolymerizable systems for preparation of high thickness coatings for wood, paper, plastic, card board or metal surfaces)

RN 842172-59-2 HCAPLUS

CN 1-Propanone, 1-[4-[4-(2-hydroxy-2-methyl-1-oxopropyl)phenoxy]phenyl]-2-methyl-2-(4-morpholinyl)- (CA INDEX NAME)



=> FIL REGISTRY

COST IN U.S. DOLLARS

| | |
|------------|---------|
| SINCE FILE | TOTAL |
| ENTRY | SESSION |
| 13.52 | 192.09 |

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

| | |
|------------|---------|
| SINCE FILE | TOTAL |
| ENTRY | SESSION |
| -0.80 | -0.80 |

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STRUCTURE FILE UPDATES: 1 DEC 2008 HIGHEST RN 1078205-21-6

DICTIONARY FILE UPDATES: 1 DEC 2008 HIGHEST RN 1078205-21-6

10566880

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TSCA INFORMATION NOW CURRENT THROUGH July 5, 2008.

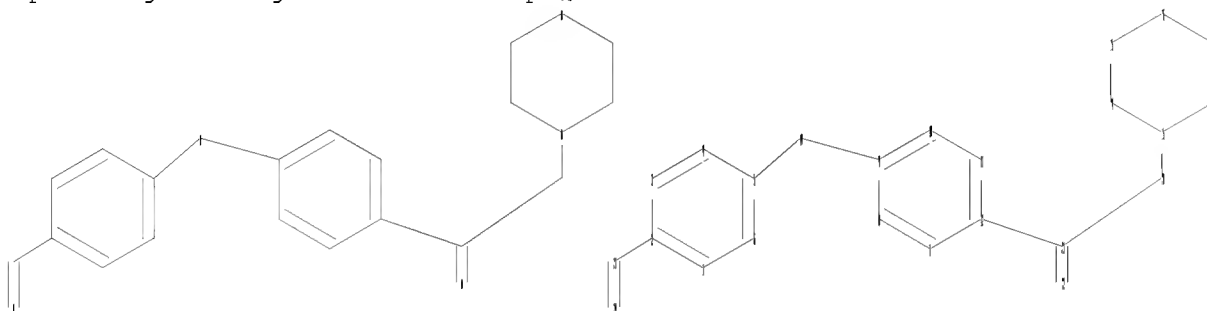
Please note that search-term pricing does apply when
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REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document. For information
on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

=>

Uploading C:\Program Files\Stnexp\Queries\10566880a.str



chain nodes :
19 20 21 22 23 24
ring nodes :
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18
chain bonds :
2-23 5-19 9-19 12-21 13-20 20-21 21-22 23-24
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12 13-14 13-18
14-15 15-16 16-17 17-18
exact/norm bonds :
5-19 9-19 13-14 13-18 13-20 14-15 15-16 16-17 17-18 21-22 23-24
exact bonds :
2-23 12-21 20-21
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12
isolated ring systems :
containing 1 : 7 : 13 :

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:CLASS
20:CLASS 21:CLASS 22:CLASS 23:CLASS 24:CLASS

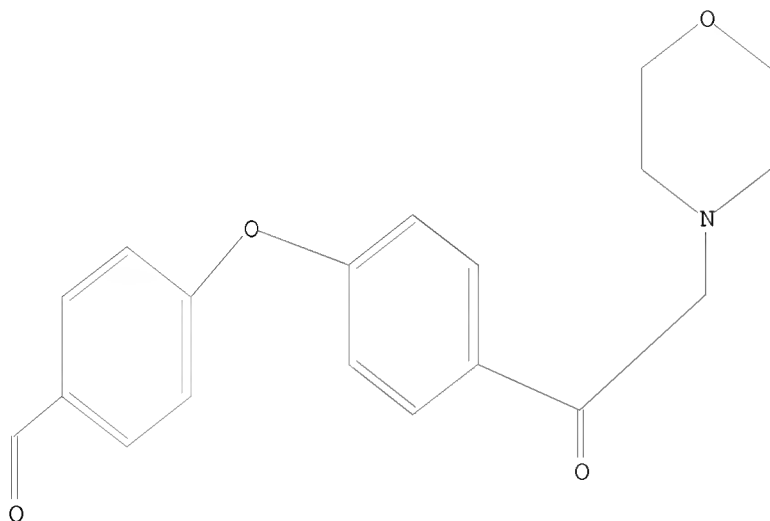
10566880

L5 STRUCTURE UPLOADED

$$\Rightarrow d \mid 15$$

L5 HAS NO ANSWERS

| | |
|----|-----|
| L5 | STR |
|----|-----|



Structure attributes must be viewed using STN Express query preparation.

=> s 15

SAMPLE SEARCH INITIATED 09:42:42 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 6 TO ITERATE

100.0% PROCESSED 6 ITERATIONS

0 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

| | | |
|-----------------------|------|-----|
| PROJECTED ITERATIONS: | 6 TO | 266 |
|-----------------------|------|-----|

PROJECTED ANSWERS: 0 TO 0

L6 0 SEA SSS SAM L5

```
=> s 15 sss full
```

FULL SEARCH INITIATED 09:42:50 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 182 TO ITERATE

100.0% PROCESSED 182 ITERATIONS

2 ANSWERS

SEARCH TIME: 00.00.01

L7 2 SEA SSS FUL L5

10566880

=> FIL HCAPLUS

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

178.36

370.45

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

SESSION

CA SUBSCRIBER PRICE

0.00

-0.80

FILE 'HCAPLUS' ENTERED AT 09:42:58 ON 03 DEC 2008

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FILE COVERS 1907 - 3 Dec 2008 VOL 149 ISS 23

FILE LAST UPDATED: 2 Dec 2008 (20081202/ED)

HCAplus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2008.

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This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 17

L8 1 L7

=> s 17 sss full

L9 1 L7

=> d 19 ibib abs hitstr tot

L9 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:141006 HCAPLUS

DOCUMENT NUMBER: 142:221238

TITLE: Clear photopolymerizable systems for the preparation of high thickness coatings, their application and to solid surfaces coated with them

INVENTOR(S): Norcini, Gabriele; Romagnano, Stefano; Visconti, Marco; Li Bassi, Giuseppe

PATENT ASSIGNEE(S): Lamberti S.p.A., Italy

SOURCE: PCT Int. Appl., 27 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|------------------|------------|
| WO 2005014515 | A2 | 20050217 | WO 2004-EP51699 | 20040803 |
| WO 2005014515 | A3 | 20050428 | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| CA 2532458 | A1 | 20050217 | CA 2004-2532458 | 20040803 |
| EP 1670740 | A2 | 20060621 | EP 2004-766405 | 20040803 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK | | | | |
| CN 1832912 | A | 20060913 | CN 2004-80022487 | 20040803 |
| JP 2007501776 | T | 20070201 | JP 2006-522355 | 20040803 |
| US 20060246228 | A1 | 20061102 | US 2006-566880 | 20060202 |
| PRIORITY APPLN. INFO.: | | | IT 2003-VA28 | A 20030807 |
| | | | WO 2004-EP51699 | W 20040803 |

OTHER SOURCE(S): MARPAT 142:221238

AB The clear photopolymerizable systems comprise ethylenically unsatd. oligomers and/or monomers and ≥ 1 bifunctional photoinitiators such as Me₂C(OH)CO-p-C₆H₄O-p-C₆H₄COC(OH)Me₂ (I, preparation given) responsible for a high reactivity, of complete crosslinking in depth, and good yellow and white indexes (ASTM D1925-700). A coating matrix contained Ebecryl 220 75 OTA 480 12.5 HDDA 12.5 %, and photoinitiator I.

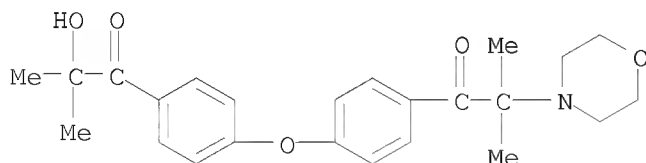
IT 842172-59-2P

RL: CAT (Catalyst use); IMF (Industrial manufacture); PREP (Preparation); USES (Uses)

(clear photopolymerizable systems for preparation of high thickness coatings for wood, paper, plastic, card board or metal surfaces)

RN 842172-59-2 HCAPLUS

CN 1-Propanone, 1-[4-[4-(2-hydroxy-2-methyl-1-oxopropyl)phenoxy]phenyl]-2-methyl-2-(4-morpholinyl)- (CA INDEX NAME)



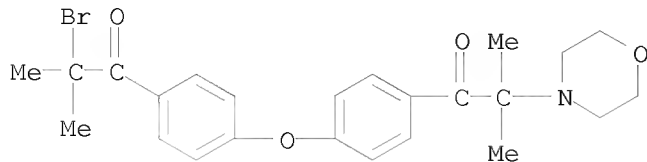
IT 842172-58-1P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(clear photopolymerizable systems for preparation of high thickness coatings for wood, paper, plastic, card board or metal surfaces)

10566880

RN 842172-58-1 HCAPLUS
CN 1-Propanone, 1-[4-[4-(2-bromo-2-methyl-1-oxopropyl)phenoxy]phenyl]-2-methyl-2-(4-morpholinyl)- (CA INDEX NAME)



=> FIL REGISTRY
COST IN U.S. DOLLARS

| SINCE FILE | TOTAL |
|------------|---------|
| ENTRY | SESSION |
| 24.28 | 394.73 |

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

| SINCE FILE | TOTAL |
|------------|---------|
| ENTRY | SESSION |
| -0.80 | -1.60 |

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STRUCTURE FILE UPDATES: 1 DEC 2008 HIGHEST RN 1078205-21-6
DICTIONARY FILE UPDATES: 1 DEC 2008 HIGHEST RN 1078205-21-6

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TSCA INFORMATION NOW CURRENT THROUGH July 5, 2008.

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conducting SmartSELECT searches.

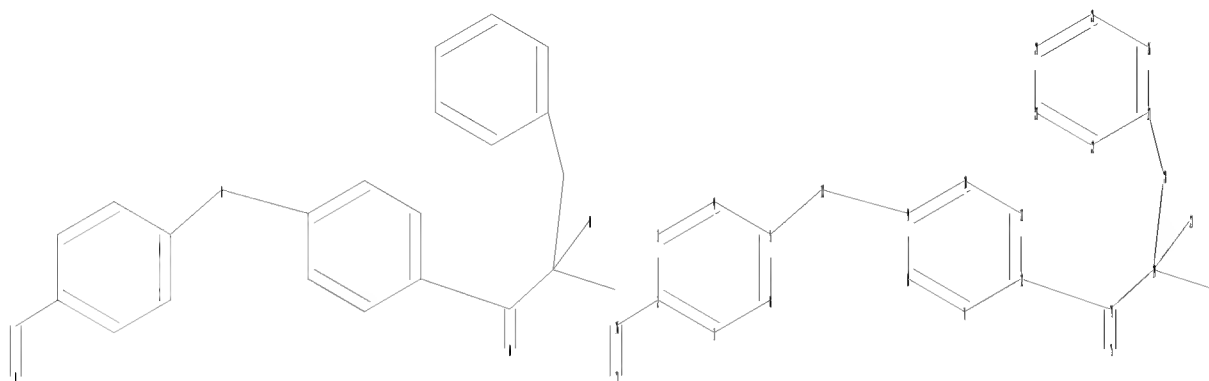
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predicted properties as well as tags indicating availability of
experimental property data in the original document. For information
on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

=>

Uploading C:\Program Files\Stnexp\Queries\10566880b.str

10566880



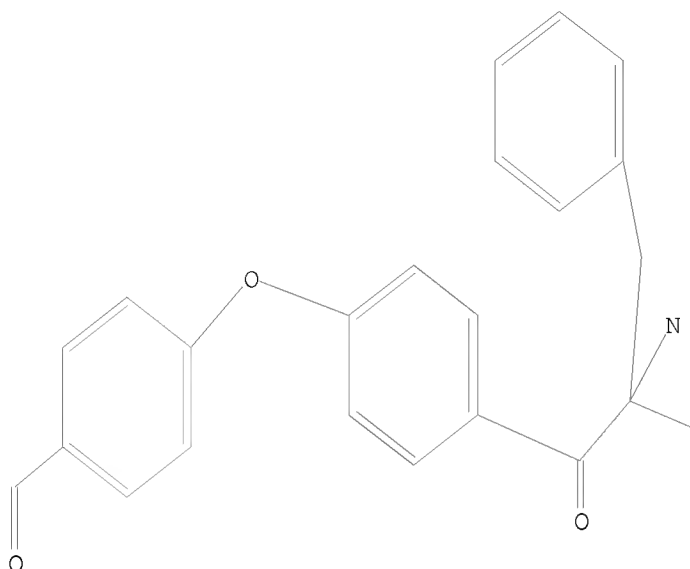
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chain nodes :
13 14 15 16 17 19 20 21 28
ring nodes :
1 2 3 4 5 6 7 8 9 10 11 12 22 23 24 25 26 27
chain bonds :
2-16 5-13 9-13 12-14 14-15 14-19 16-17 19-20 19-21 19-28 27-28
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12 22-23 22-27
23-24 24-25 25-26 26-27
exact/norm bonds :
5-13 9-13 14-15 16-17 19-21
exact bonds :
2-16 12-14 14-19 19-20 19-28 27-28
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12 22-23 22-27
23-24 24-25 25-26 26-27
isolated ring systems :
containing 1 : 7 : 22 :
```

```
Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
11:Atom 12:Atom 13:CLASS 14:CLASS 15:CLASS 16:CLASS 17:CLASS 19:CLASS
20:CLASS 21:CLASS 22:Atom 23:Atom 24:CLASS 25:Atom 26:Atom 27:Atom 28:CLASS
```

L10 STRUCTURE UPLOADED

```
=> d l10
L10 HAS NO ANSWERS
L10 STR
```

10566880



Structure attributes must be viewed using STN Express query preparation.

=> s l10

SAMPLE SEARCH INITIATED 09:47:16 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 1 TO ITERATE

100.0% PROCESSED 1 ITERATIONS 0 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**

PROJECTED ITERATIONS: 1 TO 80
PROJECTED ANSWERS: 0 TO 0

L11 0 SEA SSS SAM L10

=> s l10 sss full

FULL SEARCH INITIATED 09:47:23 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 28 TO ITERATE

100.0% PROCESSED 28 ITERATIONS 1 ANSWERS
SEARCH TIME: 00.00.01

L12 1 SEA SSS FUL L10

=> FIL HCAPLUS

COST IN U.S. DOLLARS

| SINCE FILE | TOTAL |
|------------|---------|
| ENTRY | SESSION |
| 178.82 | 573.55 |

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

| SINCE FILE | TOTAL |
|------------|---------|
| ENTRY | SESSION |

10566880

CA SUBSCRIBER PRICE

0.00

-1.60

FILE 'HCAPLUS' ENTERED AT 09:48:01 ON 03 DEC 2008
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FILE COVERS 1907 - 3 Dec 2008 VOL 149 ISS 23
FILE LAST UPDATED: 2 Dec 2008 (20081202/ED)

HCAplus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2008.

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s l12

L13 1 L12

=> s l12 sss full

L14 1 L12

=> d l14 ibib abs hitstr tot

L14 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:141006 HCAPLUS

DOCUMENT NUMBER: 142:221238

TITLE: Clear photopolymerizable systems for the preparation of high thickness coatings, their application and to solid surfaces coated with them

INVENTOR(S): Norcini, Gabriele; Romagnano, Stefano; Visconti, Marco; Li Bassi, Giuseppe

PATENT ASSIGNEE(S): Lamberti S.p.A., Italy

SOURCE: PCT Int. Appl., 27 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|----------|
| ----- | --- | ----- | ----- | ----- |
| WO 2005014515 | A2 | 20050217 | WO 2004-EP51699 | 20040803 |
| WO 2005014515 | A3 | 20050428 | | |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
 RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

CA 2532458 A1 20050217 CA 2004-2532458 20040803
 EP 1670740 A2 20060621 EP 2004-766405 20040803

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK

CN 1832912 A 20060913 CN 2004-80022487 20040803
 JP 2007501776 T 20070201 JP 2006-522355 20040803
 US 20060246228 A1 20061102 US 2006-566880 20060202

PRIORITY APPLN. INFO.: IT 2003-VA28 A 20030807
 WO 2004-EP51699 W 20040803

OTHER SOURCE(S): MARPAT 142:221238

AB The clear photopolymerizable systems comprise ethylenically unsatd. oligomers and/or monomers and ≥ 1 bifunctional photoinitiators such as Me₂C(OH)CO-p-C₆H₄O-p-C₆H₄COC(OH)Me₂ (I, preparation given) responsible for a high reactivity, of complete crosslinking in depth, and good yellow and white indexes (ASTM D1925-700). A coating matrix contained Ebecryl 220 75 OTA 480 12.5 HDDA 12.5 %, and photoinitiator I.

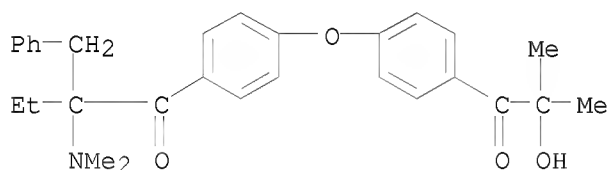
IT 842172-62-7P

RL: CAT (Catalyst use); IMF (Industrial manufacture); PREP (Preparation); USES (Uses)

(clear photopolymerizable systems for preparation of high thickness coatings for wood, paper, plastic, card board or metal surfaces)

RN 842172-62-7 HCAPLUS

CN 1-Butanone, 2-(dimethylamino)-1-[4-[4-(2-hydroxy-2-methyl-1-oxopropyl)phenoxy]phenyl]-2-(phenylmethyl)- (9CI) (CA INDEX NAME)



=> FIL REGISTRY

COST IN U.S. DOLLARS

| SINCE FILE ENTRY | TOTAL SESSION |
|------------------|---------------|
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FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

| SINCE FILE ENTRY | TOTAL SESSION |
|------------------|---------------|
| -0.80 | -2.40 |

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STRUCTURE FILE UPDATES: 1 DEC 2008 HIGHEST RN 1078205-21-6
DICTIONARY FILE UPDATES: 1 DEC 2008 HIGHEST RN 1078205-21-6

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TSCA INFORMATION NOW CURRENT THROUGH July 5, 2008.

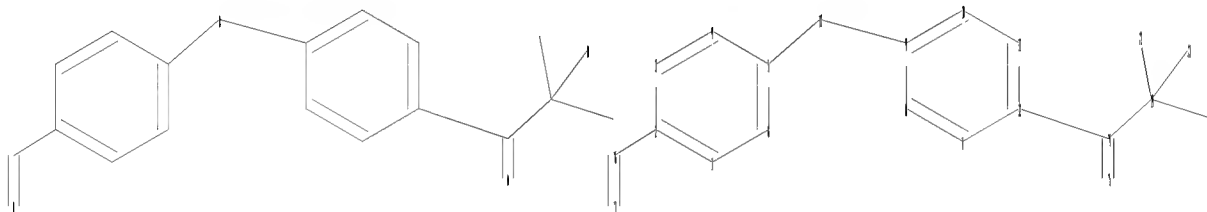
Please note that search-term pricing does apply when
conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
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<http://www.cas.org/support/stngen/stndoc/properties.html>

=>

Uploading C:\Program Files\Stnexp\Queries\10566880x.str



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13 14 15 16 17 19 20 21 22
ring nodes :
1 2 3 4 5 6 7 8 9 10 11 12
chain bonds :
2-16 5-13 9-13 12-14 14-15 14-19 16-17 19-20 19-21 19-22
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12
exact/norm bonds :
5-13 9-13 14-15 16-17 19-21
exact bonds :
2-16 12-14 14-19 19-20 19-22
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12
isolated ring systems :
containing 1 : 7 :

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
11:Atom 12:Atom 13:CLASS 14:CLASS 15:CLASS 16:CLASS 17:CLASS 19:CLASS
20:CLASS 21:CLASS 22:CLASS

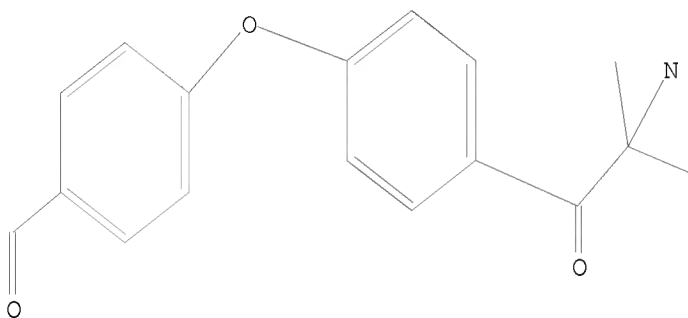
10566880

L15 STRUCTURE UPLOADED

=> d l15

L15 HAS NO ANSWERS

L15 STR



Structure attributes must be viewed using STN Express query preparation.

=> s l15

SAMPLE SEARCH INITIATED 09:52:48 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 76 TO ITERATE

100.0% PROCESSED 76 ITERATIONS

0 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

 BATCH **COMPLETE**

PROJECTED ITERATIONS: 997 TO 2043

PROJECTED ANSWERS: 0 TO 0

L16 0 SEA SSS SAM L15

=> s l15 sss full

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100.0% PROCESSED 1602 ITERATIONS

1 ANSWERS

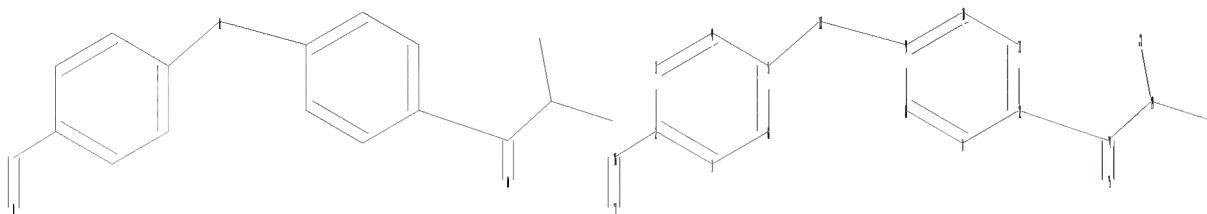
SEARCH TIME: 00.00.01

L17 1 SEA SSS FUL L15

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10566880

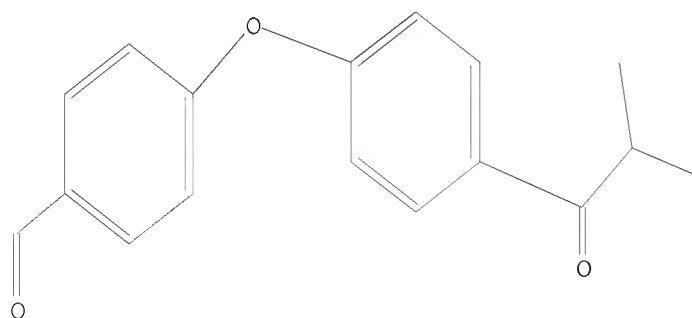


chain nodes :
13 14 15 16 17 19 20 21
ring nodes :
1 2 3 4 5 6 7 8 9 10 11 12
chain bonds :
2-16 5-13 9-13 12-14 14-15 14-19 16-17 19-20 19-21
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12
exact/norm bonds :
5-13 9-13 14-15 16-17
exact bonds :
2-16 12-14 14-19 19-20 19-21
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12
isolated ring systems :
containing 1 : 7 :

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
11:Atom 12:Atom 13:CLASS 14:CLASS 15:CLASS 16:CLASS 17:CLASS 19:CLASS
20:CLASS 21:CLASS

L18 STRUCTURE UPLOADED

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L18 HAS NO ANSWERS
L18 STR



10566880

Structure attributes must be viewed using STN Express query preparation.

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SAMPLE SCREEN SEARCH COMPLETED - 472 TO ITERATE

100.0% PROCESSED 472 ITERATIONS

2 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS: 8137 TO 10743

PROJECTED ANSWERS: 2 TO 124

L19 2 SEA SSS SAM L18

=> s 118 sss full

FULL SEARCH INITIATED 09:54:15 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 9340 TO ITERATE

100.0% PROCESSED 9340 ITERATIONS

29 ANSWERS

SEARCH TIME: 00.00.01

L20 29 SEA SSS FUL L18

=> FIL HCAPLUS

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

357.18

955.01

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

SESSION

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-2.40

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FILE COVERS 1907 - 3 Dec 2008 VOL 149 ISS 23

FILE LAST UPDATED: 2 Dec 2008 (20081202/ED)

HCAplus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2008.

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=> d his

(FILE 'HOME' ENTERED AT 09:39:36 ON 03 DEC 2008)

FILE 'REGISTRY' ENTERED AT 09:39:52 ON 03 DEC 2008

L1 STRUCTURE UPLOADED

L2 0 S L1

L3 1 S L1 SSS FULL

FILE 'HCAPLUS' ENTERED AT 09:40:32 ON 03 DEC 2008

L4 1 S L3

FILE 'REGISTRY' ENTERED AT 09:42:22 ON 03 DEC 2008

L5 STRUCTURE UPLOADED

L6 0 S L5

L7 2 S L5 SSS FULL

FILE 'HCAPLUS' ENTERED AT 09:42:58 ON 03 DEC 2008

L8 1 S L7

L9 1 S L7 SSS FULL

FILE 'REGISTRY' ENTERED AT 09:46:57 ON 03 DEC 2008

L10 STRUCTURE UPLOADED

L11 0 S L10

L12 1 S L10 SSS FULL

FILE 'HCAPLUS' ENTERED AT 09:48:01 ON 03 DEC 2008

L13 1 S L12

L14 1 S L12 SSS FULL

FILE 'REGISTRY' ENTERED AT 09:52:30 ON 03 DEC 2008

L15 STRUCTURE UPLOADED

L16 0 S L15

L17 1 S L15 SSS FULL

L18 STRUCTURE UPLOADED

L19 2 S L18

L20 29 S L18 SSS FULL

FILE 'HCAPLUS' ENTERED AT 09:54:19 ON 03 DEC 2008

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L21 1 L17

=> s 120

L22 16 L20

=> s 122 and py<=2003

24012931 PY<=2003

L23 4 L22 AND PY<=2003

=> s 122 and p/dt

10566880

6459381 P/DT
L24 10 L22 AND P/DT

=> s l24 and us/pc
1868534 US/PC
L25 7 L24 AND US/PC

=> d l21 ibib abs hitstr tot

L21 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:141006 HCAPLUS

DOCUMENT NUMBER: 142:221238

TITLE: Clear photopolymerizable systems for the preparation
of high thickness coatings, their application and to
solid surfaces coated with them

INVENTOR(S): Norcini, Gabriele; Romagnano, Stefano; Visconti,
Marco; Li Bassi, Giuseppe

PATENT ASSIGNEE(S): Lamberti S.p.A., Italy

SOURCE: PCT Int. Appl., 27 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--|----------|------------------|------------|
| WO 2005014515 | A2 | 20050217 | WO 2004-EP51699 | 20040803 |
| WO 2005014515 | A3 | 20050428 | | |
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| RW: | BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| CA 2532458 | A1 | 20050217 | CA 2004-2532458 | 20040803 |
| EP 1670740 | A2 | 20060621 | EP 2004-766405 | 20040803 |
| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK | | | |
| CN 1832912 | A | 20060913 | CN 2004-80022487 | 20040803 |
| JP 2007501776 | T | 20070201 | JP 2006-522355 | 20040803 |
| US 20060246228 | A1 | 20061102 | US 2006-566880 | 20060202 |
| PRIORITY APPLN. INFO.: | | | IT 2003-VA28 | A 20030807 |
| | | | WO 2004-EP51699 | W 20040803 |

OTHER SOURCE(S): MARPAT 142:221238

AB The clear photopolymerizable systems comprise ethylenically unsatd. oligomers and/or monomers and ≥ 1 bifunctional photoinitiators such as Me₂C(OH)CO-p-C₆H₄O-p-C₆H₄COC(OH)Me₂ (I, preparation given) responsible for a high reactivity, of complete crosslinking in depth, and good yellow and white indexes (ASTM D1925-700). A coating matrix contained Ebecryl 220 75 OTA 480 12.5 HDDA 12.5 %, and photoinitiator I.

IT 842172-62-7P

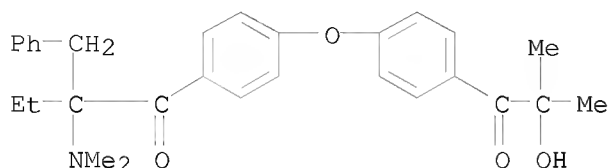
10566880

RL: CAT (Catalyst use); IMF (Industrial manufacture); PREP (Preparation);
USES (Uses)

(clear photopolymerizable systems for preparation of high thickness coatings
for wood, paper, plastic, card board or metal surfaces)

RN 842172-62-7 HCAPLUS

CN 1-Butanone, 2-(dimethylamino)-1-[4-[4-(2-hydroxy-2-methyl-1-oxopropyl)phenoxy]phenyl]-2-(phenylmethyl)- (9CI) (CA INDEX NAME)



=> d 123 ibib abs hitstr tot

L23 ANSWER 1 OF 4 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2000:493494 HCAPLUS

DOCUMENT NUMBER: 133:105462

TITLE: Benzophenones, their production and their use as
polymerization photoinitiators

INVENTOR(S): Avar, Lajos; Bar, Rene; Sanahuja, Victor

PATENT ASSIGNEE(S): Clariant Finance (BVI) Limited, Virgin I. (Brit.);
Clariant International Ltd.

SOURCE: PCT Int. Appl., 21 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: German

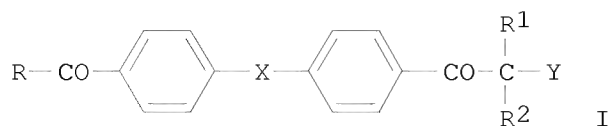
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|--------------|
| WO 2000041990 | A1 | 20000720 | WO 2000-IB24 | 20000111 <-- |
| W: JP, US | | | | |
| RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| EP 1140761 | A1 | 20011010 | EP 2000-900032 | 20000111 <-- |
| EP 1140761 | B1 | 20031008 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI | | | | |
| JP 2002534488 | T | 20021015 | JP 2000-593560 | 20000111 <-- |
| AT 251605 | T | 20031015 | AT 2000-900032 | 20000111 <-- |
| PT 1140761 | T | 20040227 | PT 2000-900032 | 20000111 |
| ES 2207485 | T3 | 20040601 | ES 2000-900032 | 20000111 |
| US 6441244 | B1 | 20020827 | US 2001-889437 | 20010712 <-- |
| PRIORITY APPLN. INFO.: | | | CH 1999-47 | A 19990112 |
| | | | WO 2000-IB24 | W 20000111 |

OTHER SOURCE(S): MARPAT 133:105462

GI

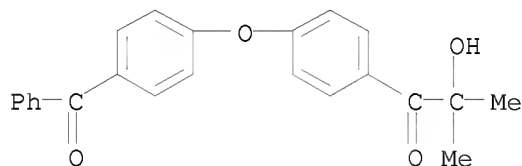


AB Benzophenones (I; R = optionally substituted Ph, naphthyl, heteroarom. ring; X = O, S, SO, SO₂; R₁, R₂ = C₁-14-alkyl totaling 4-16 C atoms, R₁R₂ may be C₄-8-alkylene; Y = hydroxy, C₁-12-alkoxy, C₁-4-alkylamino, di-C₁-4-alkylamino; piperidino, morpholino) are obtained from p-RCOC₆H₄XPh by acylation with HO₂CCHR₁R₂ or a derivative such as an acid halide with subsequent replacement of the tertiary H with Y. I are effective (0.5-5%) as photoinitiators for polymerization and crosslinking. Thus, p-phenoxybenzophenone was acylated with isobutyryl chloride and the product was then brominated and hydrolyzed to give I (R = Ph, R₁, R₂ = Me; X = O; Y = OH), which could be used to crosslink bisphenol A-epichlorohydrin copolymer diacrylate with pentaerythritol tetraacrylate.

IT 283600-32-8P 283600-34-0P
 RL: CAT (Catalyst use); IMF (Industrial manufacture); PREP (Preparation); USES (Uses)
 (catalyst; production of benzophenone derivative catalysts for photochem. polymerization and crosslinking)

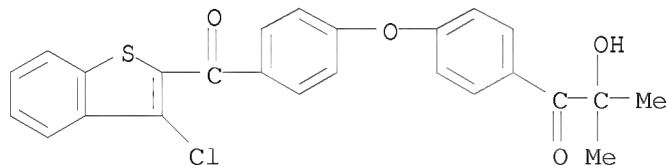
RN 283600-32-8 HCAPLUS

CN 1-Propanone, 1-[4-(4-benzoylphenoxy)phenyl]-2-hydroxy-2-methyl- (CA INDEX NAME)



RN 283600-34-0 HCAPLUS

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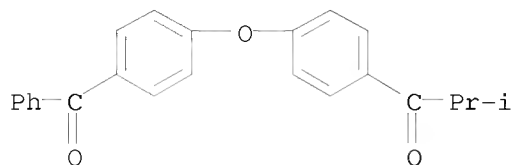


IT 283600-35-1P 283600-37-3P 283600-38-4P
 283600-39-5P
 RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
 (intermediate; production of benzophenone derivative catalysts for photochem. polymerization and crosslinking)

10566880

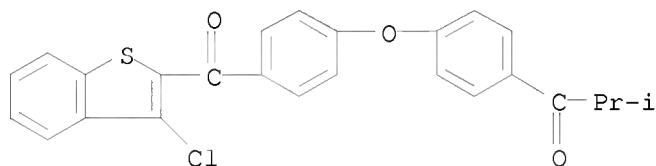
RN 283600-35-1 HCAPLUS

CN 1-Propanone, 1-[4-(4-benzoylphenoxy)phenyl]-2-methyl- (CA INDEX NAME)



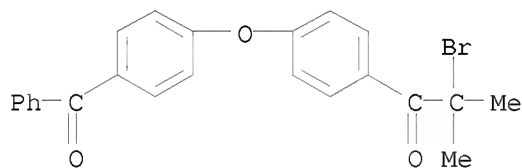
RN 283600-37-3 HCAPLUS

CN 1-Propanone, 1-[4-[4-[(3-chlorobenzo[b]thien-2-yl)carbonyl]phenoxy]phenyl]-2-methyl- (CA INDEX NAME)



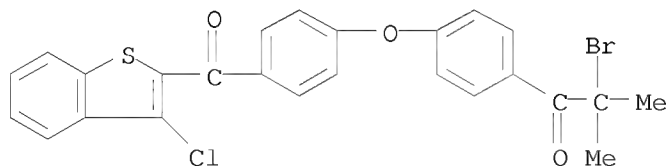
RN 283600-38-4 HCAPLUS

CN 1-Propanone, 1-[4-(4-benzoylphenoxy)phenyl]-2-bromo-2-methyl- (CA INDEX NAME)



RN 283600-39-5 HCAPLUS

CN 1-Propanone, 2-bromo-1-[4-[4-[(3-chlorobenzo[b]thien-2-yl)carbonyl]phenoxy]phenyl]-2-methyl- (CA INDEX NAME)



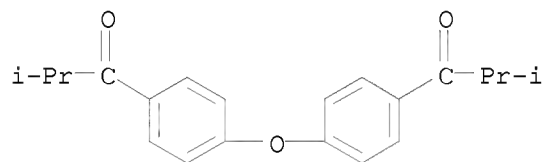
REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 2 OF 4 HCAPLUS COPYRIGHT 2008 ACS on STN

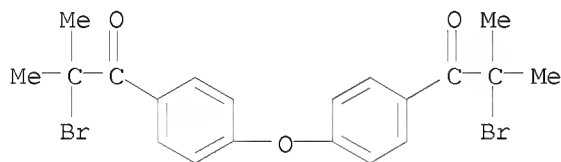
ACCESSION NUMBER: 1994:604908 HCAPLUS

DOCUMENT NUMBER: 121:204908

ORIGINAL REFERENCE NO.: 121:37297a, 37300a
 TITLE: Reactions of zinc and silicon enolates prepared from
 4,4'-di(2-bromoisobutyryl)diphenyl ether with
 electrophilic reagents
 AUTHOR(S): Shchepin, V. V.; Russkikh, N. Yu.; Desyatkov, D. A.
 CORPORATE SOURCE: Perm. Gos. Univ., Perm, Russia
 SOURCE: Zhurnal Obshchei Khimii (1994), 64(2), 276-8
 CODEN: ZOKHA4; ISSN: 0044-460X
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 OTHER SOURCE(S): CASREACT 121:204908
 AB Reaction of (4-Me₂CBrCOC₆H₄)₂O with Zn forms the corresponding zinc
 enolate, which when treated with RCOC₁ (R = Me, Me₃C) or with Me₃SiCl gave
 61-69% [4-Me₂C:C(O₂CR)C₆H₄]₂O or [4-Me₂C:C(OSiMe₃)C₆H₄]₂O, resp. The
 latter, being a silyl enolate, reacts with PrCOCl, EtOCH₂Cl, or
 4-ClSC₆H₄Cl to give C-alkylation or -acylation products.
 IT 157891-84-4
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (bromination of)
 RN 157891-84-4 HCAPLUS
 CN 1-Propanone, 1,1'-(oxydi-4,1-phenylene)bis[2-methyl- (CA INDEX NAME)]

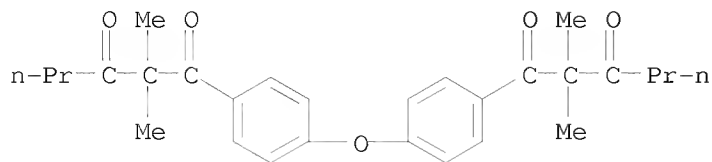


IT 157891-77-5
 RL: PROC (Process)
 (conversion of, to zinc enolate)
 RN 157891-77-5 HCAPLUS
 CN 1-Propanone, 1,1'-(oxydi-4,1-phenylene)bis[2-bromo-2-methyl- (CA INDEX NAME)]



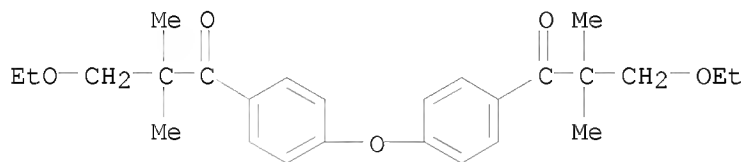
IT 157891-81-1P 157891-82-2P 157891-83-3P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 157891-81-1 HCAPLUS
 CN 1,3-Hexanedione, 1,1'-(oxydi-4,1-phenylene)bis[2,2-dimethyl- (9CI) (CA INDEX NAME)]

10566880



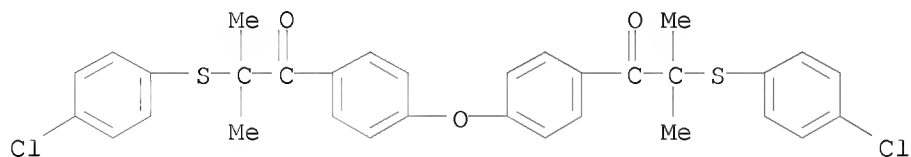
RN 157891-82-2 HCAPLUS

CN 1-Propanone, 1,1'-(oxydi-4,1-phenylene)bis[3-ethoxy-2,2-dimethyl- (9CI)
(CA INDEX NAME)



RN 157891-83-3 HCAPLUS

CN 1-Propanone, 1,1'-(oxydi-4,1-phenylene)bis[2-[(4-chlorophenyl)thio]-2-methyl- (9CI) (CA INDEX NAME)



L23 ANSWER 3 OF 4 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1982:218820 HCAPLUS

DOCUMENT NUMBER: 96:218820

ORIGINAL REFERENCE NO.: 96:36187a,36190a

TITLE: Bisbenzoyl sensitizers for photopolymerization or photocrosslinking process and composition

INVENTOR(S): Felder, Louis; Kirchmayr, Rudolf; Huesler, Rinaldo

PATENT ASSIGNEE(S): Ciba-Geigy Corp. , USA

SOURCE: U.S., 15 pp. Cont.-in-part of U.S. Ser. No. 970,016.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|------|----------|-----------------|--------------|
| US 4321118 | A | 19820323 | US 1979-105744 | 19791219 <-- |
| US 4318791 | A | 19820309 | US 1978-970016 | 19781218 <-- |
| ZA 7807234 | A | 19791227 | ZA 1978-7234 | 19781221 <-- |
| PL 117576 | B1 | 19810831 | PL 1978-212042 | 19781222 <-- |

| | | | | |
|------------|----|----------|----------------|--------------|
| CS 214670 | B2 | 19820528 | CS 1978-8840 | 19781222 <-- |
| US 4308400 | A | 19811229 | US 1979-108277 | 19791228 <-- |
| US 4315807 | A | 19820216 | US 1979-108276 | 19791228 <-- |
| CA 1142949 | A2 | 19830315 | CA 1982-396116 | 19820211 <-- |
| CA 1155863 | A2 | 19831025 | CA 1982-396118 | 19820211 <-- |
| CA 1202025 | A2 | 19860318 | CA 1984-469858 | 19841211 <-- |

PRIORITY APPLN. INFO.:

| | | |
|----------------|----|----------|
| CH 1977-15884 | A | 19771222 |
| CH 1978-2518 | A | 19780308 |
| CH 1978-9723 | A | 19780918 |
| US 1978-970016 | A2 | 19781218 |
| CA 1978-318328 | A3 | 19781220 |

AB Aromatic-aliphatic ketones which are substituted in the α -position are useful as photosensitizers for the photopolymer. of unsatd. compds. or for photochem. crosslinking of polyolefins. Thus, a mixture containing Plex 6616 [71965-95-2] (acrylate resin) 80, trimethylolpropane triacrylate [15625-89-5] 20, and PhCOCMe₂NMe₂ [52486-76-7] 2 parts was applied as a 40- μ -thick film on a glass plate, exposed to air for 20 s, and irradiated under a Hg lamp with exposure time 0.16 s/run. The pendulum hardness (Koenig) of the film after 4, 6, and 8 runs was 78, 94, and 98, resp., and the resin-photosensitizer mixture was stable in the dark at 60° > 30 days.

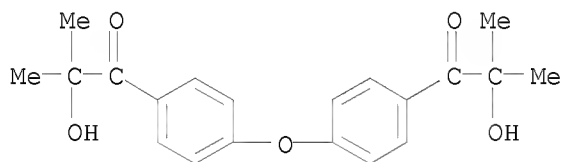
IT 71868-15-0

RL: CAT (Catalyst use); USES (Uses)

(crosslinking catalysts, photochem., for unsatd. polymers)

RN 71868-15-0 HCAPLUS

CN 1-Propanone, 1,1'-(oxydi-4,1-phenylene)bis[2-hydroxy-2-methyl- (CA INDEX NAME)



L23 ANSWER 4 OF 4 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1980:94889 HCAPLUS

DOCUMENT NUMBER: 92:94889

ORIGINAL REFERENCE NO.: 92:15515a,15518a

TITLE: Photopolymerizable systems containing aromatic-aliphatic ketones and use of these ketones as photoinitiators

INVENTOR(S): Felder, Louis; Kirchmayr, Rudolf; Huesler, Rinaldo

PATENT ASSIGNEE(S): Ciba-Geigy A.-G., Switz.

SOURCE: Eur. Pat. Appl., 64 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

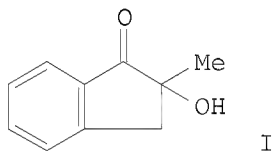
LANGUAGE: German

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|------|----------|-----------------|--------------|
| ----- | ---- | ----- | ----- | ----- |
| EP 3002 | A2 | 19790711 | EP 1978-810031 | 19781218 <-- |

| | | | | |
|-----------------------------------|----|----------|-----------------|--------------|
| EP 3002 | A3 | 19800109 | | |
| EP 3002 | B1 | 19840613 | | |
| R: BE, CH, DE, FR, GB, IT, NL, SE | | | | |
| EP 107198 | A1 | 19840502 | EP 1983-110568 | 19781218 <-- |
| EP 107198 | B1 | 19870708 | | |
| R: BE, CH, DE, FR, GB, IT, NL, SE | | | | |
| FI 7803919 | A | 19790623 | FI 1978-3919 | 19781220 <-- |
| FI 64169 | B | 19830630 | | |
| FI 64169 | C | 19831010 | | |
| CA 1234242 | A1 | 19880315 | CA 1978-318328 | 19781220 <-- |
| DK 7805762 | A | 19790623 | DK 1978-5762 | 19781221 <-- |
| DK 157083 | B | 19891106 | | |
| DK 157083 | C | 19900319 | | |
| ZA 7807234 | A | 19791227 | ZA 1978-7234 | 19781221 <-- |
| DD 141320 | A5 | 19800423 | DD 1978-210060 | 19781221 <-- |
| BR 7808406 | A | 19800520 | BR 1978-8406 | 19781221 <-- |
| AT 7809176 | A | 19820515 | AT 1978-9176 | 19781221 <-- |
| AT 369392 | B | 19821227 | | |
| SU 948300 | A3 | 19820730 | SU 1978-2702501 | 19781221 <-- |
| HU 24160 | A2 | 19821228 | HU 1978-CI1885 | 19781221 <-- |
| HU 181680 | B | 19831128 | | |
| AU 529495 | B2 | 19830609 | AU 1978-42775 | 19781221 <-- |
| JP 54099185 | A | 19790804 | JP 1978-160909 | 19781222 <-- |
| JP 01034242 | B | 19890718 | | |
| PL 117576 | B1 | 19810831 | PL 1978-212042 | 19781222 <-- |
| CS 214670 | B2 | 19820528 | CS 1978-8840 | 19781222 <-- |
| CA 1142949 | A2 | 19830315 | CA 1982-396116 | 19820211 <-- |
| CA 1155863 | A2 | 19831025 | CA 1982-396118 | 19820211 <-- |
| CA 1202025 | A2 | 19860318 | CA 1984-469858 | 19841211 <-- |
| JP 01139554 | A | 19890601 | JP 1988-250739 | 19881004 <-- |
| JP 02048536 | B | 19901025 | | |
| JP 01308404 | A | 19891213 | JP 1989-61101 | 19890315 <-- |
| JP 02057081 | B | 19901204 | | |
| PRIORITY APPLN. INFO.: | | | CH 1977-15884 | 19771222 |
| | | | CH 1978-2518 | 19780308 |
| | | | CH 1978-9723 | 19780918 |
| | | | EP 1978-810031 | A 19781218 |
| | | | CA 1978-318328 | A3 19781220 |
| OTHER SOURCE(S): | | | MARPAT 92:94889 | |
| GI | | | | |



AB Thirty-four compds. of type RCOCr1R2R3 ($\text{R} = \text{Ph}$, substituted Ph , 2-thienyl; $\text{R1} = \text{Me}$, Et ; $\text{R2} = \text{Me}$, Bu , $\text{CH}_2\text{CH}_2\text{CO}_2\text{Me}$; $\text{R3} = \text{NMe}_2$, morpholino, OH , piperidinyl, OMe , allyloxy, or similar group), 1-benzoyl-1-hydroxycyclohexane [947-19-3], [4-(HOCMe_2CO) C_6H_4] $_2\text{O}$ [71868-15-0], 1,4-bis(2-benzoyl-2-propyl)piperazine [71868-03-6], compound I [25412-59-3], 1-benzoyl-1-methyloxirane [49837-27-6], and 3 similar compds. are prepared for use as initiators for the photopolymerization.

unsatd. compds. and for the photochem. crosslinking of polyolefins. Thus, a 40- μ layer of a mixture of Plex 6616 [71965-95-2] (acrylate resin) 80, trimethylolpropane triacrylate [15625-89-5] 20, and BzCMe2NMe2 [52486-76-7] 2 parts was crosslinked during <1 s under UV light.

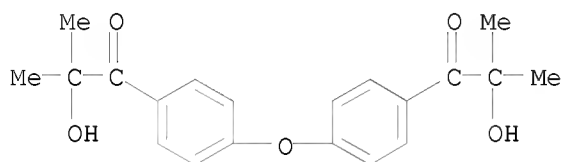
IT 71868-15-0

RL: CAT (Catalyst use); USES (Uses)

(catalysts, for photopolymn. and photocrosslinking)

RN 71868-15-0 HCAPLUS

CN 1-Propanone, 1,1'-(oxydi-4,1-phenylene)bis[2-hydroxy-2-methyl- (CA INDEX NAME)



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L25 ANSWER 1 OF 7 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:175288 HCAPLUS

DOCUMENT NUMBER: 146:231055

TITLE: Photopolymerizable systems containing low-extractable and low-volatile coinitiators for coatings

INVENTOR(S): Romagnano, Stefano; Casiraghi, Angelo; Visconti, Marco; Li Bassi, Giuseppe

PATENT ASSIGNEE(S): Lamberti SpA, Italy

SOURCE: PCT Int. Appl., 14pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| WO 2007017298 | A1 | 20070215 | WO 2006-EP62213 | 20060510 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| AU 2006278164 | A1 | 20070215 | AU 2006-278164 | 20060510 |
| CA 2616289 | A1 | 20070215 | CA 2006-2616289 | 20060510 |
| EP 1910425 | A1 | 20080416 | EP 2006-755130 | 20060510 |

R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
 IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR
 CN 101243109 A 20080813 CN 2006-80029284 20080205
 US 20080213502 A1 20080904 US 2008-997934 20080205 <--
 KR 2008039416 A 20080507 KR 2008-703495 20080213
 PRIORITY APPLN. INFO.: IT 2005-VA49 A 20050805
 WO 2006-EP62213 W 20060510

OTHER SOURCE(S): MARPAT 146:231055

AB This invention concerns photopolymerizable systems containing ethylenically unsatd. reactive oligomers and/or monomers comprising at least one photoinitiator and at least one cointiator having low-extractability and low-volatility; the photopolymerizable systems of the invention are particularly suited for the preparation of food-packaging coatings.

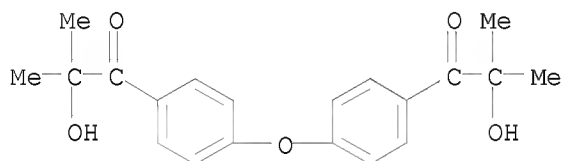
IT 71868-15-0

RL: CAT (Catalyst use); USES (Uses)

(photoinitiator; photopolymerizable systems containing low-extractable and low-volatile cointiators for coatings)

RN 71868-15-0 HCAPLUS

CN 1-Propanone, 1,1'-(oxydi-4,1-phenylene)bis[2-hydroxy-2-methyl- (CA INDEX NAME)



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L25 ANSWER 2 OF 7 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:395244 HCAPLUS

DOCUMENT NUMBER: 142:430709

TITLE: Production of a novel photoinitiator in the form of white solid powder

INVENTOR(S): Norcini, Gabriele; Romagnano, Stefano; Visconti, Marco; Li Bassi, Giuseppe

PATENT ASSIGNEE(S): Lamberti S.p.A., Italy

SOURCE: PCT Int. Appl., 17 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| WO 2005040083 | A1 | 20050506 | WO 2004-EP52532 | 20041014 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |

RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
 AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
 EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,
 SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,
 SN, TD, TG

| | | | | |
|--|----|----------|------------------|--------------|
| CA 2541993 | A1 | 20050506 | CA 2004-2541993 | 20041014 |
| EP 1692088 | A1 | 20060823 | EP 2004-791220 | 20041014 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK | | | | |
| CN 1871200 | A | 20061129 | CN 2004-80031536 | 20041014 |
| BR 2004015828 | A | 20070102 | BR 2004-15828 | 20041014 |
| JP 2007513069 | T | 20070524 | JP 2006-537276 | 20041014 |
| US 20070135531 | A1 | 20070614 | US 2006-577194 | 20060426 <-- |

PRIORITY APPLN. INFO.:

| | | |
|-----------------|---|----------|
| IT 2003-VA40 | A | 20031027 |
| WO 2004-EP52532 | W | 20041014 |

AB A photoinitiator, 2-hydroxy-1-[4-[4-(2-hydroxy-2-methylpropionyl)phenoxy]phenyl]-2-methyl-1-propanone, is produced as a white solid powder by (a) subjecting di-Ph ether to Friedel-Crafts reaction with an acylating agent selected from α -bromoisobutyryl bromide and α -chloroisobutyryl chloride in the presence of a Lewis acid, (b) reacting 2-bromo-1-[4-[4-(2-bromo-2-methylpropionyl)phenoxy]phenyl]-2-methyl-1-propanone or 2-chloro-1-[4-[4-(2-chloro-2-methylpropionyl)phenoxy]phenyl]-2-methyl-1-propanone obtained in the step (a) with a base at a temperature from 10° to 50° to give the photoinitiator dissolved in a solvent, and (c) recovering the photoinitiator product by crystallization. The photoinitiator is suitable for curing of coating compns. for wood, paper, cardboard, plastics, or metal surfaces. Thus, aluminum chloride (8.61 g, 64.61 mmol) was added to a solution of di-Ph ether (5 g, 29.37 mmol) and α -bromoisobutyryl bromide (purity 97.5%, 15.23 g, 64.61 mmol) in dichloromethane (50 mL) over 30 min maintaining the temperature between 0 and 5° to obtain 2-bromo-1-[4-[4-(2-bromo-2-methylpropionyl)phenoxy]phenyl]-2-methyl-1-propanone. Sodium hydroxide (50%, 8.46 g, 105.73 mmol), benzyltriethylammonium chloride (50%, 137 mg) and dichloromethane (50 mL) were added to the solution of the above intermediate (13.75 g, 29.37 mmol), and the solution was refluxed for 2 h. The photoinitiator, 2-hydroxy-1-[4-[4-(2-hydroxy-2-methylpropionyl)phenoxy]phenyl]-2-methyl-1-propanone, was produced as a white solid powder (4.9 g) having a m.p. of 96-98°.

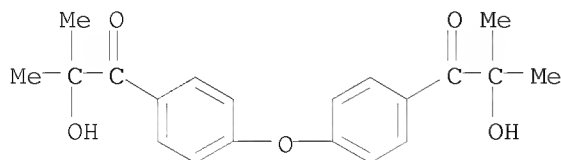
IT 71868-15-0P

RL: CAT (Catalyst use); IMF (Industrial manufacture); PREP (Preparation);
 USES (Uses)

(production of novel photoinitiator in form of white solid powder)

RN 71868-15-0 HCAPLUS

CN 1-Propanone, 1,1'-(oxydi-4,1-phenylene)bis[2-hydroxy-2-methyl- (CA INDEX
 NAME)



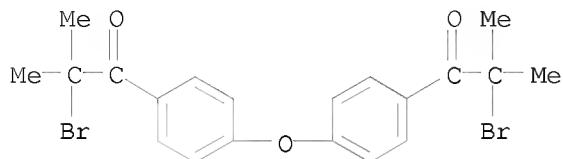
IT 157891-77-5P 649757-85-7P

10566880

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT
(Reactant or reagent)
(production of novel photoinitiator in form of white solid powder)

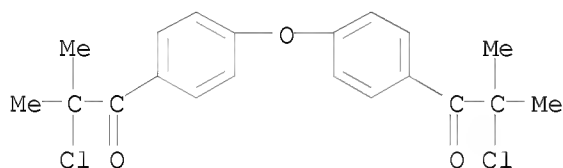
RN 157891-77-5 HCAPLUS

CN 1-Propanone, 1,1'-(oxydi-4,1-phenylene)bis[2-bromo-2-methyl- (CA INDEX
NAME)



RN 649757-85-7 HCAPLUS

CN 1-Propanone, 1,1'-(oxydi-4,1-phenylene)bis[2-chloro-2-methyl- (9CI) (CA
INDEX NAME)



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L25 ANSWER 3 OF 7 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:141006 HCAPLUS

DOCUMENT NUMBER: 142:221238

TITLE: Clear photopolymerizable systems for the preparation
of high thickness coatings, their application and to
solid surfaces coated with them

INVENTOR(S): Norcini, Gabriele; Romagnano, Stefano; Visconti,
Marco; Li Bassi, Giuseppe

PATENT ASSIGNEE(S): Lamberti S.p.A., Italy

SOURCE: PCT Int. Appl., 27 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|----------|
| WO 2005014515 | A2 | 20050217 | WO 2004-EP51699 | 20040803 |
| WO 2005014515 | A3 | 20050428 | | |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,

TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
 RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
 AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
 EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,
 SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,
 SN, TD, TG

CA 2532458 A1 20050217 CA 2004-2532458 20040803
 EP 1670740 A2 20060621 EP 2004-766405 20040803

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK

CN 1832912 A 20060913 CN 2004-80022487 20040803

JP 2007501776 T 20070201 JP 2006-522355 20040803

US 20060246228 A1 20061102 US 2006-566880 20060202 <--

PRIORITY APPLN. INFO.:

IT 2003-VA28 A 20030807

WO 2004-EP51699 W 20040803

OTHER SOURCE(S): MARPAT 142:221238

AB The clear photopolymerizable systems comprise ethylenically unsatd.
 oligomers and/or monomers and ≥ 1 bifunctional photoinitiators such
 as Me₂C(OH)CO-p-C₆H₄O-p-C₆H₄COC(OH)Me₂ (I, preparation given) responsible for a
 high reactivity, of complete crosslinking in depth, and good yellow and
 white indexes (ASTM D1925-700). A coating matrix contained Ebecryl 220 75
 OTA 480 12.5 HDDA 12.5 %, and photoinitiator I.

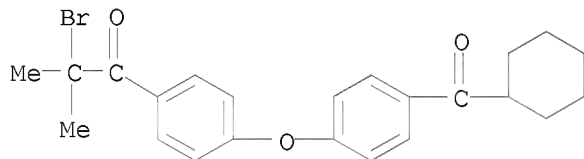
IT 842172-53-6

RL: RCT (Reactant); RACT (Reactant or reagent)

(bromination; clear photopolymerizable systems for preparation of high
 thickness coatings for wood, paper, plastic, card board or metal
 surfaces)

RN 842172-53-6 HCAPLUS

CN 1-Propanone, 2-bromo-1-[4-[4-(cyclohexylcarbonyl)phenoxy]phenyl]-2-methyl-
 (CA INDEX NAME)



IT 842172-52-5P 842172-55-8P 842172-59-2P

842172-62-7P

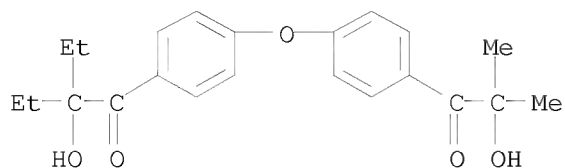
RL: CAT (Catalyst use); IMF (Industrial manufacture); PREP (Preparation);
 USES (Uses)

(clear photopolymerizable systems for preparation of high thickness coatings
 for wood, paper, plastic, card board or metal surfaces)

RN 842172-52-5 HCAPLUS

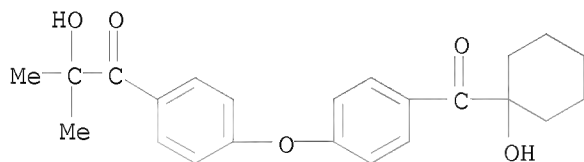
CN 1-Butanone, 2-ethyl-2-hydroxy-1-[4-[4-(2-hydroxy-2-methyl-1-oxopropyl)phenoxy]phenyl]- (CA INDEX NAME)

10566880



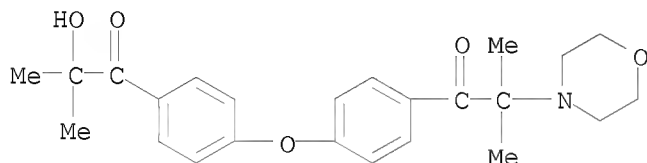
RN 842172-55-8 HCAPLUS

CN 1-Propanone, 2-hydroxy-1-[4-[4-[(1-hydroxycyclohexyl)carbonyl]phenoxy]phenyl]-2-methyl- (CA INDEX NAME)



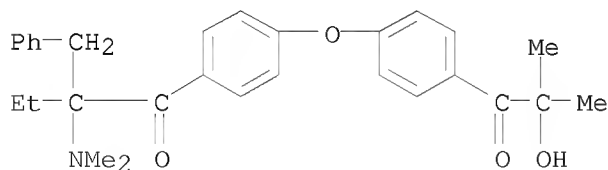
RN 842172-59-2 HCAPLUS

CN 1-Propanone, 1-[4-[4-(2-hydroxy-2-methyl-1-oxopropyl)phenoxy]phenyl]-2-methyl-2-(4-morpholinyl)- (CA INDEX NAME)



RN 842172-62-7 HCAPLUS

CN 1-Butanone, 2-(dimethylamino)-1-[4-[4-(2-hydroxy-2-methyl-1-oxopropyl)phenoxy]phenyl]-2-(phenylmethyl)- (9CI) (CA INDEX NAME)



IT 842172-51-4P 842172-54-7P 842172-58-1P

842172-60-5P 842172-61-6P

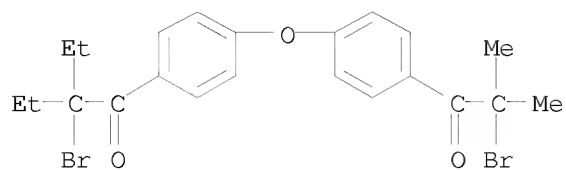
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(clear photopolymerizable systems for preparation of high thickness coatings for wood, paper, plastic, card board or metal surfaces)

RN 842172-51-4 HCAPLUS

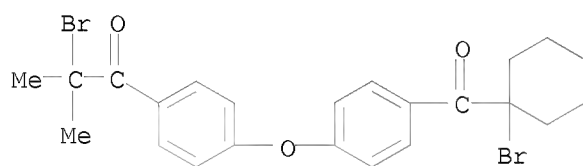
CN 1-Butanone, 2-bromo-1-[4-[4-(2-bromo-2-methyl-1-oxopropyl)phenoxy]phenyl]-2-ethyl- (CA INDEX NAME)

10566880



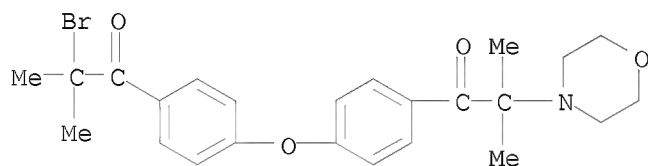
RN 842172-54-7 HCAPLUS

CN 1-Propanone, 2-bromo-1-[4-[4-[(1-bromocyclohexyl)carbonyl]phenoxy]phenyl]-2-methyl- (CA INDEX NAME)



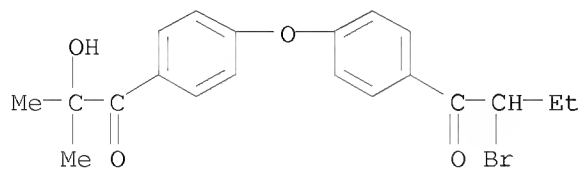
RN 842172-58-1 HCAPLUS

CN 1-Propanone, 1-[4-[4-(2-bromo-2-methyl-1-oxopropyl)phenoxy]phenyl]-2-methyl-2-(4-morpholinyl)- (CA INDEX NAME)



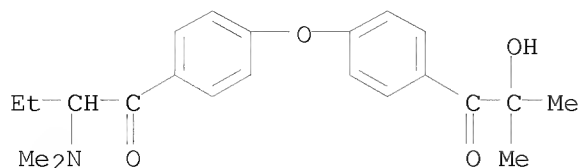
RN 842172-60-5 HCAPLUS

CN 1-Butanone, 2-bromo-1-[4-[4-(2-hydroxy-2-methyl-1-oxopropyl)phenoxy]phenyl]- (CA INDEX NAME)



RN 842172-61-6 HCAPLUS

CN 1-Butanone, 2-(dimethylamino)-1-[4-[4-(2-hydroxy-2-methyl-1-oxopropyl)phenoxy]phenyl]- (CA INDEX NAME)



L25 ANSWER 4 OF 7 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:1079741 HCAPLUS

DOCUMENT NUMBER: 142:58408

TITLE: Oxetane compound-containing actinic ray-curable compositions, ink-jet inks and printing method using them

INVENTOR(S): Nishizeki, Masato; Okubo, Kimihiko

PATENT ASSIGNEE(S): Konica Minolta Medical & Graphic Inc., Japan

SOURCE: Eur. Pat. Appl., 70 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|--------------|
| EP 1486526 | A1 | 20041215 | EP 2004-253353 | 20040604 |
| EP 1486526 | B1 | 20060816 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR | | | | |
| JP 2005002166 | A | 20050106 | JP 2003-165126 | 20030610 |
| US 7169446 | B2 | 20070130 | US 2004-861572 | 20040607 <-- |
| PRIORITY APPLN. INFO.: | | | JP 2003-165126 | A 20030610 |

OTHER SOURCE(S): MARPAT 142:58408

AB The compns. with good curability without being influenced by ambient humidity and giving good adhesion to substrate, contain (A) oxetanyl group-containing aromatic compds. and (B) photolytically acid-generating compds.

where the A includes (substituted) benzene compds. bearing oxetanyl groups on 1 and 4 positions or on 1 and 3 positions, (substituted) di-Ph ether compds. bearing oxetanyl groups on 4 and 4' positions, (substituted) diphenoxy compds. bearing oxetanyl groups on 4 and 4' positions, or (substituted) bis(o-ether-substituted phenyl) compds. bearing oxetanyl groups on 5 and 5' positions. Ink-jet inks contain the compns., other oxetane compds. having no substituent at the 2 position of an oxetane ring in mol. and optionally epoxy compds.

IT 808168-37-8P 808168-43-6P 808168-44-7P

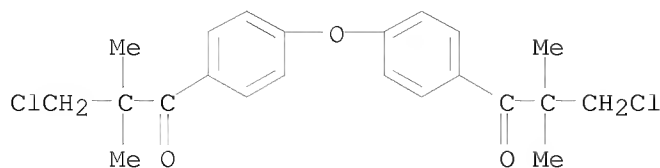
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(manufacture of oxetane compound-containing radiation-curable compns. for use in ink-jet inks)

RN 808168-37-8 HCAPLUS

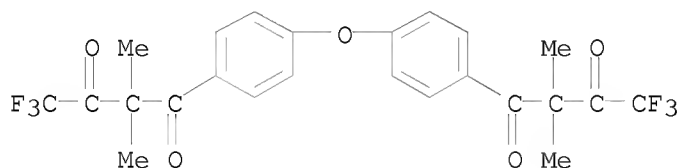
CN 1-Propanone, 3-chloro-1-[4-[4-(3-chloro-2,2-dimethyl-1-oxopropyl)phenoxy]phenyl]-2,2-dimethyl- (CA INDEX NAME)

10566880



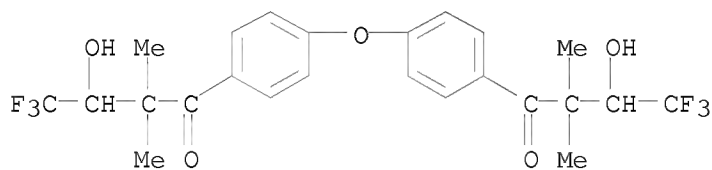
RN 808168-43-6 HCAPLUS

CN 1,3-Butanedione, 1,1'-(oxydi-4,1-phenylene)bis[4,4,4-trifluoro-2,2-dimethyl- (9CI) (CA INDEX NAME)



RN 808168-44-7 HCAPLUS

CN 1-Butanone, 1,1'-(oxydi-4,1-phenylene)bis[4,4,4-trifluoro-3-hydroxy-2,2-dimethyl- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L25 ANSWER 5 OF 7 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:80741 HCAPLUS

DOCUMENT NUMBER: 140:128829

TITLE: Difunctional photoinitiators used in polymer compositions containing ethylenically unsaturated monomers for coatings, printing inks and composite materials

INVENTOR(S): Huesler, Rinaldo; Fuchs, Andre

PATENT ASSIGNEE(S): Ciba Specialty Chemicals Holding Inc., Switz.

SOURCE: PCT Int. Appl., 50 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|----------|
| WO 2004009651 | A1 | 20040129 | WO 2003-EP7482 | 20030710 |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

| | | | | |
|---|----|----------|-----------------|--------------|
| CA 2486784 | A1 | 20040129 | CA 2003-2486784 | 20030710 |
| AU 2003246675 | A1 | 20040209 | AU 2003-246675 | 20030710 |
| BR 2003011729 | A | 20050301 | BR 2003-11729 | 20030710 |
| EP 1523506 | A1 | 20050420 | EP 2003-764968 | 20030710 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK | | | | |
| CN 1668648 | A | 20050914 | CN 2003-817014 | 20030710 |
| JP 2005533156 | T | 20051104 | JP 2004-522436 | 20030710 |
| NZ 537094 | A | 20060929 | NZ 2003-537094 | 20030710 |
| MX 2004PA12672 | A | 20050323 | MX 2004-PA12672 | 20041215 |
| US 20050239971 | A1 | 20051027 | US 2005-521650 | 20050113 <-- |
| PRIORITY APPLN. INFO.: | | | EP 2002-405632 | A 20020719 |
| | | | WO 2003-EP7482 | W 20030710 |

OTHER SOURCE(S): MARPAT 140:128829

AB The photoinitiator has a formula $\text{ROC}(\text{CH}_3)_2\text{CO-p-C}_6\text{H}_4\text{A-p-C}_6\text{H}_4\text{COC}(\text{CH}_3)_2\text{OR}$ (A = -O-, -CH₂-, -CH(CH₃)-, -C(CH₃)₂-; R = H, Me, trimethylsilyl). A compns. comprises (A) ≥ 1 ethylenically unsatd. compound, (B) the above photoinitiator, (C) optionally, binders or additives, (D) optionally, photoinitiators or coinitiators. Thus, 221.3 g di-Ph ether was reacted with 318.6 g isobutyric acid chloride, chlorinated and hydrolyzed to give 190.5 g white crystal with m.p. 97.2-97.6°.

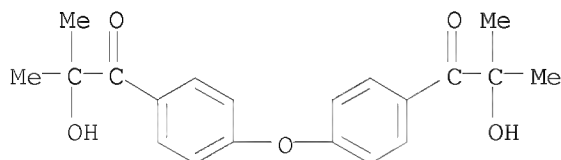
IT 71868-15-0P 649757-94-8P 649757-95-9P

RL: CAT (Catalyst use); IMF (Industrial manufacture); PREP (Preparation); USES (Uses)

(preparation of difunctional photoinitiators used in polymer compns. containing ethylenically unsatd. monomers for coatings, printing inks and composite materials)

RN 71868-15-0 HCAPLUS

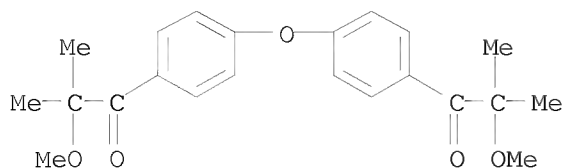
CN 1-Propanone, 1,1'-(oxydi-4,1-phenylene)bis[2-hydroxy-2-methyl- (CA INDEX NAME)



RN 649757-94-8 HCAPLUS

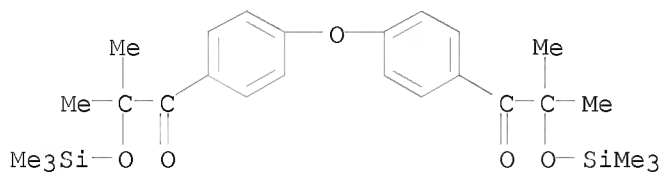
CN 1-Propanone, 1,1'-(oxydi-4,1-phenylene)bis[2-methoxy-2-methyl- (9CI) (CA INDEX NAME)

10566880



RN 649757-95-9 HCAPLUS

CN 1-Propanone, 1,1'-(oxy-di-4,1-phenylene)bis[2-methyl-2-[(trimethylsilyl)oxy]- (9CI) (CA INDEX NAME)



IT 157891-84-4P 649757-85-7P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

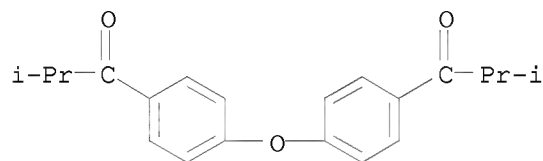
(preparation of difunctional photoinitiators used in polymer compns.

containing

ethylenically unsatd. monomers for coatings, printing inks and composite materials)

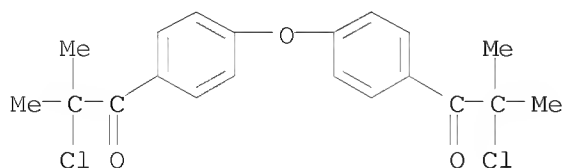
RN 157891-84-4 HCAPLUS

CN 1-Propanone, 1,1'-(oxydi-4,1-phenylene)bis[2-methyl- (CA INDEX NAME)



RN 649757-85-7 HCAPLUS

CN 1-Propanone, 1,1'-(oxydi-4,1-phenylene)bis[2-chloro-2-methyl- (9CI) (CA INDEX NAME)



REFERENCE COUNT:

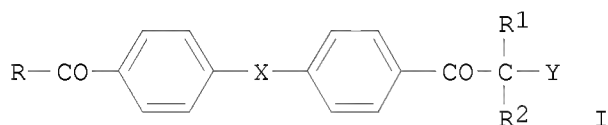
2

THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L25 ANSWER 6 OF 7 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2000:493494 HCAPLUS
 DOCUMENT NUMBER: 133:105462
 TITLE: Benzophenones, their production and their use as polymerization photoinitiators
 INVENTOR(S): Avar, Lajos; Bar, Rene; Sanahuja, Victor
 PATENT ASSIGNEE(S): Clariant Finance (BVI) Limited, Virgin I. (Brit.); Clariant International Ltd.
 SOURCE: PCT Int. Appl., 21 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|-------------------|----------|-----------------|--------------|
| WO 2000041990 | A1 | 20000720 | WO 2000-IB24 | 20000111 |
| W: JP, US | | | | |
| RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| EP 1140761 | A1 | 20011010 | EP 2000-900032 | 20000111 |
| EP 1140761 | B1 | 20031008 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI | | | | |
| JP 2002534488 | T | 20021015 | JP 2000-593560 | 20000111 |
| AT 251605 | T | 20031015 | AT 2000-900032 | 20000111 |
| PT 1140761 | T | 20040227 | PT 2000-900032 | 20000111 |
| ES 2207485 | T3 | 20040601 | ES 2000-900032 | 20000111 |
| US 6441244 | B1 | 20020827 | US 2001-889437 | 20010712 <-- |
| PRIORITY APPLN. INFO.: | | | CH 1999-47 | A 19990112 |
| | | | WO 2000-IB24 | W 20000111 |
| OTHER SOURCE(S): | MARPAT 133:105462 | | | |
| GI | | | | |



AB Benzophenones (I; R = optionally substituted Ph, naphthyl, heteroarom. ring; X = O, S, SO, SO₂; R₁, R₂ = C₁-14-alkyl totaling 4-16 C atoms, R₁R₂ may be C₄-8-alkylene; Y = hydroxy, C₁-12-alkoxy, C₁-4-alkylamino, di-C₁-4-alkylamino; piperidino, morpholino) are obtained from p-RCOC₆H₄XPh by acylation with HO₂CCHR₁R₂ or a derivative such as an acid halide with subsequent replacement of the tertiary H with Y. I are effective (0.5-5%) as photoinitiators for polymerization and crosslinking. Thus, p-phenoxybenzophenone was acylated with isobutyryl chloride and the product was then brominated and hydrolyzed to give I (R = Ph, R₁, R₂ = Me; X = O; Y = OH), which could be used to crosslink bisphenol A-epichlorohydrin copolymer diacrylate with pentaerythritol tetraacrylate.

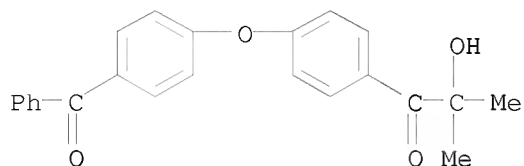
IT 283600-32-8P 283600-34-0P
 RL: CAT (Catalyst use); IMF (Industrial manufacture); PREP (Preparation);

USES (Uses)

(catalyst; production of benzophenone derivative catalysts for photochem. polymerization and crosslinking)

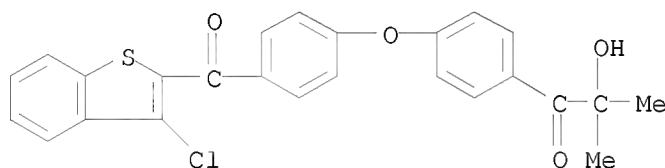
RN 283600-32-8 HCAPLUS

CN 1-Propanone, 1-[4-(4-benzoylphenoxy)phenyl]-2-hydroxy-2-methyl- (CA INDEX NAME)



RN 283600-34-0 HCAPLUS

CN 1-Propanone, 1-[4-[4-[(3-chlorobenzo[b]thien-2-yl)carbonyl]phenoxy]phenyl]-2-hydroxy-2-methyl- (CA INDEX NAME)



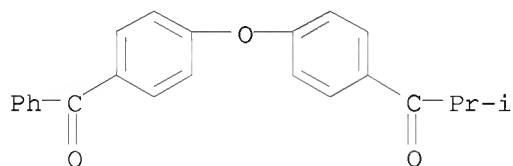
IT 283600-35-1P 283600-37-3P 283600-38-4P
283600-39-5P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; production of benzophenone derivative catalysts for photochem. polymerization and crosslinking)

RN 283600-35-1 HCAPLUS

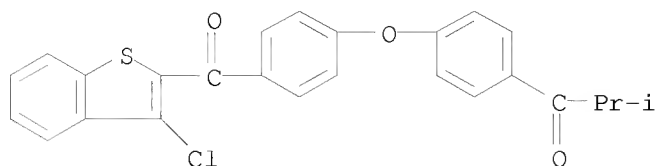
CN 1-Propanone, 1-[4-(4-benzoylphenoxy)phenyl]-2-methyl- (CA INDEX NAME)



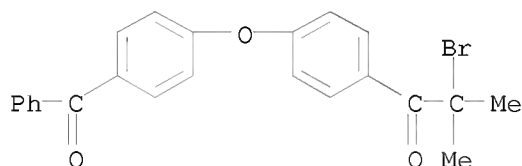
RN 283600-37-3 HCAPLUS

CN 1-Propanone, 1-[4-[4-[(3-chlorobenzo[b]thien-2-yl)carbonyl]phenoxy]phenyl]-2-methyl- (CA INDEX NAME)

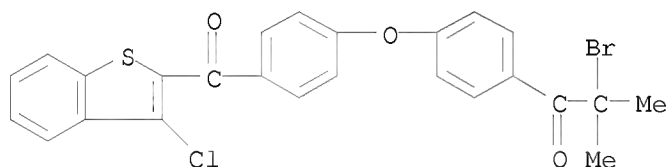
10566880



RN 283600-38-4 HCAPLUS
CN 1-Propanone, 1-[4-(4-benzoylphenoxy)phenyl]-2-bromo-2-methyl- (CA INDEX NAME)



RN 283600-39-5 HCAPLUS
CN 1-Propanone, 2-bromo-1-[4-[4-[(3-chlorobenzo[b]thien-2-yl)carbonyl]phenoxy]phenyl]-2-methyl- (CA INDEX NAME)



REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L25 ANSWER 7 OF 7 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1982:218820 HCAPLUS
DOCUMENT NUMBER: 96:218820
ORIGINAL REFERENCE NO.: 96:36187a,36190a
TITLE: Bisbenzoyl sensitizers for photopolymerization or photocrosslinking process and composition
INVENTOR(S): Felder, Louis; Kirchmayr, Rudolf; Huesler, Rinaldo
PATENT ASSIGNEE(S): Ciba-Geigy Corp. , USA
SOURCE: U.S., 15 pp. Cont.-in-part of U.S. Ser. No. 970,016.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|------|----------|-----------------|--------------|
| US 4321118 | A | 19820323 | US 1979-105744 | 19791219 <-- |
| US 4318791 | A | 19820309 | US 1978-970016 | 19781218 <-- |

| | | | | |
|------------------------|----|----------|----------------|--------------|
| ZA 7807234 | A | 19791227 | ZA 1978-7234 | 19781221 |
| PL 117576 | B1 | 19810831 | PL 1978-212042 | 19781222 |
| CS 214670 | B2 | 19820528 | CS 1978-8840 | 19781222 |
| US 4308400 | A | 19811229 | US 1979-108277 | 19791228 <-- |
| US 4315807 | A | 19820216 | US 1979-108276 | 19791228 <-- |
| CA 1142949 | A2 | 19830315 | CA 1982-396116 | 19820211 |
| CA 1155863 | A2 | 19831025 | CA 1982-396118 | 19820211 |
| CA 1202025 | A2 | 19860318 | CA 1984-469858 | 19841211 |
| PRIORITY APPLN. INFO.: | | | CH 1977-15884 | A 19771222 |
| | | | CH 1978-2518 | A 19780308 |
| | | | CH 1978-9723 | A 19780918 |
| | | | US 1978-970016 | A2 19781218 |
| | | | CA 1978-318328 | A3 19781220 |

AB Aromatic-aliphatic ketones which are substituted in the α -position are useful as photosensitizers for the photopolymerization of unsaturated compounds or for photochemical crosslinking of polyolefins. Thus, a mixture containing Plex 6616 [71965-95-2] (acrylate resin) 80, trimethylolpropane triacrylate [15625-89-5] 20, and PhCOCMe₂NMe₂ [52486-76-7] 2 parts was applied as a 40- μ -thick film on a glass plate, exposed to air for 20 s, and irradiated under a Hg lamp with exposure time 0.16 s/run. The pendulum hardness (Koenig) of the film after 4, 6, and 8 runs was 78, 94, and 98, respectively, and the resin-photosensitizer mixture was stable in the dark at 60° > 30 days.

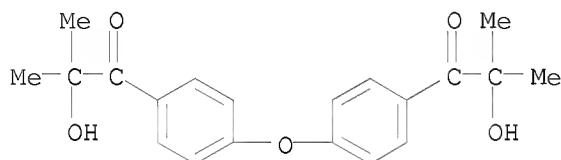
IT 71868-15-0

RL: CAT (Catalyst use); USES (Uses)

(crosslinking catalysts, photochemical, for unsaturated polymers)

RN 71868-15-0 HCAPLUS

CN 1-Propanone, 1,1'-(oxydi-4,1-phenylene)bis[2-hydroxy-2-methyl- (CA INDEX NAME)



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L24 ANSWER 1 OF 10 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:175456 HCAPLUS

DOCUMENT NUMBER: 146:229788

TITLE: Low-extractable and low-volatile
coinitiator-containing photopolymerizable and
photo-curable coating compositions

INVENTOR(S): Casiraghi, Angelo; Romagnano, Stefano; Visconti,
Marco; Li Bassi, Giuseppe

PATENT ASSIGNEE(S): Lamberti SpA, Italy

SOURCE: PCT Int. Appl., 14 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|----------|
| WO 2007017348 | A2 | 20070215 | WO 2006-EP64355 | 20060718 |
| WO 2007017348 | A3 | 20070405 | | |

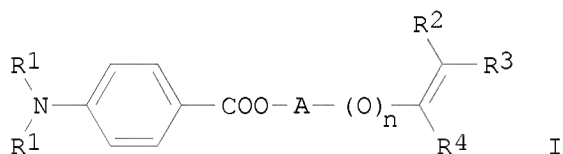
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA

PRIORITY APPLN. INFO.: IT 2005-VA50 A 20050805

OTHER SOURCE(S): MARPAT 146:229788

GI



AB A photopolymerizable systems comprises ethylenically unsatd. reactive oligomers and/or monomers, at least a photoinitiator, and a coinitiator (I) having low-extractability and low-volatility, in which R1 = linear or branched C1-4 alkyl, R2-4 = H or linear or branched C1-C4 alkyl, A = linear or branched C1-10 alkylene or cycloalkylene, n = 0 or 1. A coating composition made from the above composition for paper, metals, paper, or plastic surfaces and the coating process are also provided. Thus, 4-dimethylaminobenzoyl chloride and 3-buten-1-ol were reacted to give a co-initiator, but-3-enyl-4-(dimethylamino)benzoate.

L24 ANSWER 2 OF 10 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:175288 HCAPLUS

DOCUMENT NUMBER: 146:231055

TITLE: Photopolymerizable systems containing low-extractable and low-volatile coinitiators for coatings

INVENTOR(S): Romagnano, Stefano; Casiraghi, Angelo; Visconti, Marco; Li Bassi, Giuseppe

PATENT ASSIGNEE(S): Lamberti SpA, Italy

SOURCE: PCT Int. Appl., 14pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|------------------|------------|
| WO 2007017298 | A1 | 20070215 | WO 2006-EP62213 | 20060510 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| AU 2006278164 | A1 | 20070215 | AU 2006-278164 | 20060510 |
| CA 2616289 | A1 | 20070215 | CA 2006-2616289 | 20060510 |
| EP 1910425 | A1 | 20080416 | EP 2006-755130 | 20060510 |
| R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR | | | | |
| CN 101243109 | A | 20080813 | CN 2006-80029284 | 20080205 |
| US 20080213502 | A1 | 20080904 | US 2008-997934 | 20080205 |
| KR 2008039416 | A | 20080507 | KR 2008-703495 | 20080213 |
| PRIORITY APPLN. INFO.: | | | IT 2005-VA49 | A 20050805 |
| | | | WO 2006-EP62213 | W 20060510 |

OTHER SOURCE(S): MARPAT 146:231055

AB This invention concerns photopolymerizable systems containing ethylenically unsatd. reactive oligomers and/or monomers comprising at least one photoinitiator and at least one coinitiator having low-extractability and low-volatility; the photopolymerizable systems of the invention are particularly suited for the preparation of food-packaging coatings.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 3 OF 10 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:395244 HCAPLUS

DOCUMENT NUMBER: 142:430709

TITLE: Production of a novel photoinitiator in the form of white solid powder

INVENTOR(S): Norcini, Gabriele; Romagnano, Stefano; Visconti, Marco; Li Bassi, Giuseppe

PATENT ASSIGNEE(S): Lamberti S.p.A., Italy

SOURCE: PCT Int. Appl., 17 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|----------|
| WO 2005040083 | A1 | 20050506 | WO 2004-EP52532 | 20041014 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, | | | | |

TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
 RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
 AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
 EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,
 SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,
 SN, TD, TG

CA 2541993 A1 20050506 CA 2004-2541993 20041014

EP 1692088 A1 20060823 EP 2004-791220 20041014

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK

CN 1871200 A 20061129 CN 2004-80031536 20041014

BR 2004015828 A 20070102 BR 2004-15828 20041014

JP 2007513069 T 20070524 JP 2006-537276 20041014

US 20070135531 A1 20070614 US 2006-577194 20060426

PRIORITY APPLN. INFO.: IT 2003-VA40 A 20031027

WO 2004-EP52532 W 20041014

AB A photoinitiator, 2-hydroxy-1-[4-[4-(2-hydroxy-2-methylpropionyl)phenoxy]phenyl]-2-methyl-1-propanone, is produced as a white solid powder by (a) subjecting di-Ph ether to Friedel-Crafts reaction with an acylating agent selected from α -bromoisobutyryl bromide and α -chloroisobutyryl chloride in the presence of a Lewis acid, (b) reacting 2-bromo-1-[4-[4-(2-bromo-2-methylpropionyl)phenoxy]phenyl]-2-methyl-1-propanone or 2-chloro-1-[4-[4-(2-chloro-2-methylpropionyl)phenoxy]phenyl]-2-methyl-1-propanone obtained in the step (a) with a base at a temperature from 10° to 50° to give the photoinitiator dissolved in a solvent, and (c) recovering the photoinitiator product by crystallization. The photoinitiator is suitable for curing of coating compns. for wood, paper, cardboard, plastics, or metal surfaces. Thus, aluminum chloride (8.61 g, 64.61 mmol) was added to a solution of di-Ph ether (5 g, 29.37 mmol) and α -bromoisobutyryl bromide (purity 97.5%, 15.23 g, 64.61 mmol) in dichloromethane (50 mL) over 30 min maintaining the temperature between 0 and 5° to obtain 2-bromo-1-[4-[4-(2-bromo-2-methylpropionyl)phenoxy]phenyl]-2-methyl-1-propanone. Sodium hydroxide (50%, 8.46 g, 105.73 mmol), benzyltriethylammonium chloride (50%, 137 mg) and dichloromethane (50 mL) were added to the solution of the above intermediate (13.75 g, 29.37 mmol), and the solution was refluxed for 2 h. The photoinitiator, 2-hydroxy-1-[4-[4-(2-hydroxy-2-methylpropionyl)phenoxy]phenyl]-2-methyl-1-propanone, was produced as a white solid powder (4.9 g) having a m.p. of 96-98°.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 4 OF 10 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:253712 HCAPLUS

DOCUMENT NUMBER: 142:326060

TITLE: Liquid crystal displays and electroluminescent displays, manufacture thereof, method for sealing them, sealants therefor, and cationically photocurable resin compositions therefor

INVENTOR(S): Nishizeki, Masato; Okubo, Kimihiko

PATENT ASSIGNEE(S): Konica Minolta Medical & Graphic, Inc., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 77 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|-------------------|----------|-----------------|----------|
| JP 2005075885 | A | 20050324 | JP 2003-306275 | 20030829 |
| PRIORITY APPLN. INFO.: | | | JP 2003-306275 | 20030829 |
| OTHER SOURCE(S): | MARPAT 142:326060 | | | |
| GI | | | | |

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The compns., showing good curability at low temperature to give seals with good adhesiveness and moisture resistance, comprise (A) cationically polymerizable compds. (e.g., vinyl ethers, epoxides, oxetanes), (B) photoacid generators (e.g., onium compds.), (C) bisoxetanes chosen from I (R101-R104 = H, substituent; R105 = alkoxy, aryloxy; R106 = substituent; m1 = 0, 1, 2; n1 = 0-3), II (R201-R204 = H, substituent; R205, R206, m2, n2 = same as R105, R106, m1, n1, resp.), III (R301-R304 = H, substituent; R305, R306 = substituent; m3, n3 = 0-4), and/or 2 addnl. Markush structures, and optionally (D) inorg. fillers and (E) silane coupling agents. The bisoxetanes are effective for increasing curing conversion. Opposed substrates of LCD or EL displays are sealed with the compns.

L24 ANSWER 5 OF 10 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:141006 HCAPLUS

DOCUMENT NUMBER: 142:221238

TITLE: Clear photopolymerizable systems for the preparation of high thickness coatings, their application and to solid surfaces coated with them

INVENTOR(S): Norcini, Gabriele; Romagnano, Stefano; Visconti, Marco; Li Bassi, Giuseppe

PATENT ASSIGNEE(S): Lamberti S.p.A., Italy

SOURCE: PCT Int. Appl., 27 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|--|----------|-----------------|----------|
| WO 2005014515 | A2 | 20050217 | WO 2004-EP51699 | 20040803 |
| WO 2005014515 | A3 | 20050428 | | |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | |
| RW: | BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |

CA 2532458 A1 20050217 CA 2004-2532458 20040803
 EP 1670740 A2 20060621 EP 2004-766405 20040803
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK
 CN 1832912 A 20060913 CN 2004-80022487 20040803
 JP 2007501776 T 20070201 JP 2006-522355 20040803
 US 20060246228 A1 20061102 US 2006-566880 20060202
 PRIORITY APPLN. INFO.: IT 2003-VA28 A 20030807
 WO 2004-EP51699 W 20040803

OTHER SOURCE(S): MARPAT 142:221238

AB The clear photopolymerizable systems comprise ethylenically unsatd. oligomers and/or monomers and ≥ 1 bifunctional photoinitiators such as Me₂C(OH)CO-p-C₆H₄O-p-C₆H₄COC(OH)Me₂ (I, preparation given) responsible for a high reactivity, of complete crosslinking in depth, and good yellow and white indexes (ASTM D1925-700). A coating matrix contained Ebecryl 220 75 OTA 480 12.5 HDDA 12.5 %, and photoinitiator I.

L24 ANSWER 6 OF 10 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:1079741 HCAPLUS

DOCUMENT NUMBER: 142:58408

TITLE: Oxetane compound-containing actinic ray-curable compositions, ink-jet inks and printing method using them

INVENTOR(S): Nishizeki, Masato; Okubo, Kimihiko

PATENT ASSIGNEE(S): Konica Minolta Medical & Graphic Inc., Japan

SOURCE: Eur. Pat. Appl., '70 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|------------|
| EP 1486526 | A1 | 20041215 | EP 2004-253353 | 20040604 |
| EP 1486526 | B1 | 20060816 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR | | | | |
| JP 2005002166 | A | 20050106 | JP 2003-165126 | 20030610 |
| US 7169446 | B2 | 20070130 | US 2004-861572 | 20040607 |
| PRIORITY APPLN. INFO.: | | | JP 2003-165126 | A 20030610 |

OTHER SOURCE(S): MARPAT 142:58408

AB The compns. with good curability without being influenced by ambient humidity and giving good adhesion to substrate, contain (A) oxetanyl group-containing aromatic compds. and (B) photolytically acid-generating compds.

where the A includes (substituted) benzene compds. bearing oxetanyl groups on 1 and 4 positions or on 1 and 3 positions, (substituted) di-Ph ether compds. bearing oxetanyl groups on 4 and 4' positions, (substituted) diphenoxy compds. bearing oxetanyl groups on 4 and 4' positions, or (substituted) bis(o-ether-substituted phenyl) compds. bearing oxetanyl groups on 5 and 5' positions. Ink-jet inks contain the compns., other oxetane compds. having no substituent at the 2 position of an oxetane ring in mol. and optionally epoxy compds.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 7 OF 10 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:80741 HCAPLUS
 DOCUMENT NUMBER: 140:128829
 TITLE: Difunctional photoinitiators used in polymer compositions containing ethylenically unsaturated monomers for coatings, printing inks and composite materials
 INVENTOR(S): Huesler, Rinaldo; Fuchs, Andre
 PATENT ASSIGNEE(S): Ciba Specialty Chemicals Holding Inc., Switz.
 SOURCE: PCT Int. Appl., 50 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|------------|
| WO 2004009651 | A1 | 20040129 | WO 2003-EP7482 | 20030710 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| CA 2486784 | A1 | 20040129 | CA 2003-2486784 | 20030710 |
| AU 2003246675 | A1 | 20040209 | AU 2003-246675 | 20030710 |
| BR 2003011729 | A | 20050301 | BR 2003-11729 | 20030710 |
| EP 1523506 | A1 | 20050420 | EP 2003-764968 | 20030710 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK | | | | |
| CN 1668648 | A | 20050914 | CN 2003-817014 | 20030710 |
| JP 2005533156 | T | 20051104 | JP 2004-522436 | 20030710 |
| NZ 537094 | A | 20060929 | NZ 2003-537094 | 20030710 |
| MX 2004PA12672 | A | 20050323 | MX 2004-PA12672 | 20041215 |
| US 20050239971 | A1 | 20051027 | US 2005-521650 | 20050113 |
| PRIORITY APPLN. INFO.: | | | EP 2002-405632 | A 20020719 |
| | | | WO 2003-EP7482 | W 20030710 |

OTHER SOURCE(S): MARPAT 140:128829

AB The photoinitiator has a formula $\text{ROC}(\text{CH}_3)_2\text{CO-p-C}_6\text{H}_4\text{A-p-C}_6\text{H}_4\text{COC}(\text{CH}_3)_2\text{OR}$ (A = -O-, -CH₂-, -CH(CH₃)-, -C(CH₃)₂-; R = H, Me, trimethylsilyl). A compns. comprises (A) ≥ 1 ethylenically unsatd. compound, (B) the above photoinitiator, (C) optionally, binders or additives, (D) optionally, photoinitiators or coinitiators. Thus, 221.3 g di-Ph ether was reacted with 318.6 g isobutyric acid chloride, chlorinated and hydrolyzed to give 190.5 g white crystal with m.p. 97.2-97.6°.

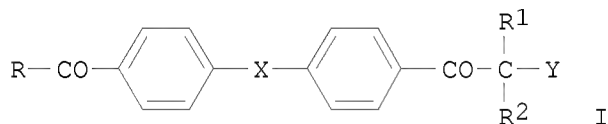
REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 8 OF 10 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2000:493494 HCAPLUS
 DOCUMENT NUMBER: 133:105462
 TITLE: Benzophenones, their production and their use as

polymerization photoinitiators
 INVENTOR(S): Avar, Lajos; Bar, Rene; Sanahuja, Victor
 PATENT ASSIGNEE(S): Clariant Finance (BVI) Limited, Virgin I. (Brit.);
 Clariant International Ltd.
 SOURCE: PCT Int. Appl., 21 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|-------------------|-----------------|------------|
| WO 2000041990 | A1 | 20000720 | WO 2000-IB24 | 20000111 |
| W: JP, US | | | | |
| RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| EP 1140761 | A1 | 20011010 | EP 2000-900032 | 20000111 |
| EP 1140761 | B1 | 20031008 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI | | | | |
| JP 2002534488 | T | 20021015 | JP 2000-593560 | 20000111 |
| AT 251605 | T | 20031015 | AT 2000-900032 | 20000111 |
| PT 1140761 | T | 20040227 | PT 2000-900032 | 20000111 |
| ES 2207485 | T3 | 20040601 | ES 2000-900032 | 20000111 |
| US 6441244 | B1 | 20020827 | US 2001-889437 | 20010712 |
| PRIORITY APPLN. INFO.: | | | CH 1999-47 | A 19990112 |
| | | | WO 2000-IB24 | W 20000111 |
| OTHER SOURCE(S): | | MARPAT 133:105462 | | |
| GI | | | | |



AB Benzophenones (I; R = optionally substituted Ph, naphthyl, heteroarom. ring; X = O, S, SO, SO₂; R₁, R₂ = C₁-14-alkyl totaling 4-16 C atoms, R₁R₂ may be C₄-8-alkylene; Y = hydroxy, C₁-12-alkoxy, C₁-4-alkylamino, di-C₁-4-alkylamino; piperidino, morpholino) are obtained from p-RCOC₆H₄XPh by acylation with HO₂CCHR₁R₂ or a derivative such as an acid halide with subsequent replacement of the tertiary H with Y. I are effective (0.5-5%) as photoinitiators for polymerization and crosslinking. Thus, p-phenoxybenzophenone was acylated with isobutyryl chloride and the product was then brominated and hydrolyzed to give I (R = Ph, R₁, R₂ = Me; X = O; Y = OH), which could be used to crosslink bisphenol A-epichlorohydrin copolymer diacrylate with pentaerythritol tetraacrylate.

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 9 OF 10 HCAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 1982:218820 HCAPLUS
 DOCUMENT NUMBER: 96:218820

10566880

ORIGINAL REFERENCE NO.: 96:36187a,36190a
TITLE: Bisbenzoyl sensitizers for photopolymerization or photocrosslinking process and composition
INVENTOR(S): Felder, Louis; Kirchmayr, Rudolf; Huesler, Rinaldo
PATENT ASSIGNEE(S): Ciba-Geigy Corp. , USA
SOURCE: U.S., 15 pp. Cont.-in-part of U.S. Ser. No. 970,016.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|-------------|
| US 4321118 | A | 19820323 | US 1979-105744 | 19791219 |
| US 4318791 | A | 19820309 | US 1978-970016 | 19781218 |
| ZA 7807234 | A | 19791227 | ZA 1978-7234 | 19781221 |
| PL 117576 | B1 | 19810831 | PL 1978-212042 | 19781222 |
| CS 214670 | B2 | 19820528 | CS 1978-8840 | 19781222 |
| US 4308400 | A | 19811229 | US 1979-108277 | 19791228 |
| US 4315807 | A | 19820216 | US 1979-108276 | 19791228 |
| CA 1142949 | A2 | 19830315 | CA 1982-396116 | 19820211 |
| CA 1155863 | A2 | 19831025 | CA 1982-396118 | 19820211 |
| CA 1202025 | A2 | 19860318 | CA 1984-469858 | 19841211 |
| PRIORITY APPLN. INFO.: | | | CH 1977-15884 | A 19771222 |
| | | | CH 1978-2518 | A 19780308 |
| | | | CH 1978-9723 | A 19780918 |
| | | | US 1978-970016 | A2 19781218 |
| | | | CA 1978-318328 | A3 19781220 |

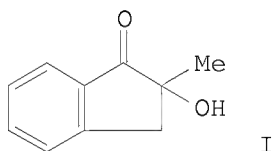
AB Aromatic-aliphatic ketones which are substituted in the α -position are useful as photosensitizers for the photopolymn. of unsatd. compds. or for photochem. crosslinking of polyolefins. Thus, a mixture containing Plex 6616 [71965-95-2] (acrylate resin) 80, trimethylolpropane triacrylate [15625-89-5] 20, and PhCOCMe2NMe2 [52486-76-7] 2 parts was applied as a 40- μ -thick film on a glass plate, exposed to air for 20 s, and irradiated under a Hg lamp with exposure time 0.16 s/run. The pendulum hardness (Koenig) of the film after 4, 6, and 8 runs was 78, 94, and 98, resp., and the resin-photosensitizer mixture was stable in the dark at 60° > 30 days.

L24 ANSWER 10 OF 10 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1980:94889 HCAPLUS
DOCUMENT NUMBER: 92:94889
ORIGINAL REFERENCE NO.: 92:15515a,15518a
TITLE: Photopolymerizable systems containing aromatic-aliphatic ketones and use of these ketones as photoinitiators
INVENTOR(S): Felder, Louis; Kirchmayr, Rudolf; Huesler, Rinaldo
PATENT ASSIGNEE(S): Ciba-Geigy A.-G., Switz.
SOURCE: Eur. Pat. Appl., 64 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|------|------|-----------------|------|
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|-----------------------------------|----|----------|-----------------|-------------|
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| EP 3002 | A3 | 19800109 | | |
| EP 3002 | B1 | 19840613 | | |
| R: BE, CH, DE, FR, GB, IT, NL, SE | | | | |
| EP 107198 | A1 | 19840502 | EP 1983-110568 | 19781218 |
| EP 107198 | B1 | 19870708 | | |
| R: BE, CH, DE, FR, GB, IT, NL, SE | | | | |
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| FI 64169 | C | 19831010 | | |
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| DK 7805762 | A | 19790623 | DK 1978-5762 | 19781221 |
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| DK 157083 | C | 19900319 | | |
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| PRIORITY APPLN. INFO.: | | | CH 1977-15884 | 19771222 |
| | | | CH 1978-2518 | 19780308 |
| | | | CH 1978-9723 | 19780918 |
| | | | EP 1978-810031 | A 19781218 |
| | | | CA 1978-318328 | A3 19781220 |
| OTHER SOURCE(S): | | | MARPAT 92:94889 | |
| GI | | | | |



AB Thirty-four compds. of type $\text{RCO}(\text{CR}_1\text{R}_2\text{R}_3)$ ($\text{R} = \text{Ph}$, substituted Ph , 2-thienyl;
 $\text{R}_1 = \text{Me}$, Et ; $\text{R}_2 = \text{Me}$, Bu , $\text{CH}_2\text{CH}_2\text{CO}_2\text{Me}$; $\text{R}_3 = \text{NMe}_2$, morpholino, OH ,
 piperidinyl, OMe , allyloxy, or similar group),
 1-benzoyl-1-hydroxycyclohexane [947-19-3], [4-($\text{HO}(\text{CMe}_2\text{CO})\text{C}_6\text{H}_4$)]₂O [71868-15-0], 1,4-bis(2-benzoyl-2-propyl)piperazine [71868-03-6],

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compound I [25412-59-3], 1-benzoyl-1-methyloxirane [49837-27-6], and 3 similar compds. are prepared for use as initiators for the photopolymer. of unsatd. compds. and for the photochem. crosslinking of polyolefins. Thus, a 40- μ layer of a mixture of Plex 6616 [71965-95-2] (acrylate resin) 80, trimethylolpropane triacrylate [15625-89-5] 20, and BzCMe₂NMe₂ [52486-76-7] 2 parts was crosslinked during <1 s under UV light.

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COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

107.95

1062.96

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

SESSION

CA SUBSCRIBER PRICE

-17.60

-20.00

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